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1. INTRODUCTION

Although the wind industry is very young, it has already made a substantial impact on the California energy market. Today, California has more than 1200 megawatts of wind generating capacity, and in 1988 produced enough output to meet the annual electricity needs of 300,000 typical California homes. As a result, California has become the leader in wind development with the predominant share of the world's total generating capacity.

As the industry began exponential growth in 1981, the California Energy Commission and the American Wind Energy Association (AWEA) recognized the need for performance and other technology related information. Subsequent efforts by these two organizations led to the adoption of the Wind Performance Reporting System (WPRS) regulations in 1984. These regulations require all wind operators with projects rated greater than 100 kW and who sell electricity to a power purchaser, to report quarterly performance and related project information to the Energy Commission. The Commission has used this information to complete quarterly and annual reports for four years.

This annual report provides a detailed compilation of all 1988 reported data. From this data, Energy Commission staff summarizes wind

industry performance information, and production and capacity trends. Additionally, tables have been included that organize the data according to statewide totals, resource areas, turbine sizes, turbine types, turbine manufacturers, project operators, and origin of turbine manufacturers.

Although many valuable observations about California's wind industry can be drawn from WPRS reported data, it is important to recognize some important limitations. First, the WPRS program has collected wind data for four years. A complete industry evaluation should consider all of this data rather than any single year. This is especially true for an industry such as wind which is so dependent on weather conditions that vary from year to year. Moreover, much of the data reported is not directly comparable because the industry still has not implemented a standardized turbine rating system. As a result, turbines are tested under different conditions and rated at widely varying miles per hour specifications. Evidence of the problem is indicated by the lack of correlation between blade swept area and turbine kW specifications. For example, one manufacturer's 400 kW turbine has only a slightly larger blade swept area than another manufacturer's 95 kW turbine. In other cases, the current product being offered by an operator or manufacturer may not be properly

represented in the report because old and new turbine data are grouped together. Often, newer equipment will be more efficient and reliable. Further, performance data does not consider other important variables such as cost per kW, expected operation and maintenance costs, durability of the system and quality of the site's wind resource. Thus, important wind industry findings presented in this annual report should be checked against many other hidden factors involved in wind development.

2. WPRS BACKGROUND

What is the Wind Performance Monitoring System (WPRS)?

California law requires the California Energy Commission to serve as a central repository in state government for the collection and dissemination of information on energy supplies. Relative to wind energy, the Commission adopted WPRS regulations on November 28, 1984. Starting in January 1985, these regulations required all California wind operators with projects rated over 100 kW to provide quarterly wind performance reports if they sold electricity to a power purchaser. These reports include actual energy production and related project information. In addition, all California power purchasers are required to file quarterly reports documenting the power purchased from these wind operators. The Commission uses this information to produce quarterly and annual reports on wind industry performance in California.

Why Were WPRS Regulations Developed?

WPRS regulations were instituted for several reasons. First, the industry, investors, financial community, and government agencies needed actual performance information to better evaluate the status of wind technology. Second, information that would help minimize tax abuse would benefit everybody involved in wind development: the industry would have less

"bad press" and better public opinion; investors would be better able to make informed investments; and government and public monies would be allocated to better performing projects. The WPRS regulations were also intended to provide performance information that is useful for government tracking of energy supplies and thereby allow for better planning of the state's energy needs.

Before federal tax credits expired in 1985, project financing was primarily venture capital from private investors who were willing to take a substantial risk on the technology due to the tax benefits they would receive. Since then, the focus of wind development has been on revenues from power sales and greater reliance on conventional financing from institutional lenders and foreign investors. WPRS information is also needed now to establish performance credibility with these new sources of financing.

What Information Do WPRS Reports Provide?

WPRS quarterly reports include the following information for all wind projects in California rated at 100 kW or greater that sell electricity: turbine manufacturers, model numbers, rotor diameters and kW ratings; the number of cumulative and new turbines installed; the projected output per turbine; the output for

each turbine model; and the output for the entire project.

What Information is Not Provided by WPRS Quarterly Reports ?

WPRS reports do not provide information on all wind energy projects in California.

Nonoperating wind projects are not required to report performance information. The absence of a project from WPRS reports typically indicates that the project is not selling any power or is less than 100 kw. Other capacity not reported includes turbines that do not produce electricity for sale including turbines installed by utilities, government organizations and research facilities. Although included in previous WPRS reports, aggregate cost data is not included in this 1988 report. This is because the cost data reported for new capacity was too limited to provide an accurate industry cost profile. Lastly, WPRS reports are not able to always differentiate between old and new turbine performance. This is because turbines are often reported in groups combining old and new machines. However, where new turbine performance could be analyzed separately, it is evaluated to track any technology improvements.

3. WPRS IMPLEMENTATION ISSUES

A number of problems were encountered and resolved the first two years of WPRS reporting and are discussed below.

Validating performance data. It was originally intended that utility quarterly reports would be used to validate operator output data. However, numerous problems occurred. First, some utilities did not provide information according to a calendar quarter. Second, utility data was only provided for the operator who filed a power sales agreement. However, in many cases more than one project was reported under a single utility contract making it difficult to verify individual project output figures. In order to establish a more reliable validation procedure, staff added utility receipts as a voluntary additional submission item to be filed with quarterly reports. Operator reported output figures that agree with either submitted utility receipts or utility reported data have been noted as validated.

Operators who failed to file. Utility quarterly reports inform Commission staff of all wind farm operators with projects rated 100 kW or greater who have sold power and are therefore required to submit WPRS reports. Those operators that sold power but did not submit reports were noted as "failed to file." By the end

of the year, seven operators had failed to file. Depending on the circumstances, Commission staff will consider various options for resolving the situation.

Operators who filed reports with data missing. Some operators filed WPRS reports with one or more data items missing. The predominant missing data item was the projected quarterly output per turbine. Apparently, some wind projects were sold with only annual output estimates. Staff will continue to try and work with operators to report complete information.

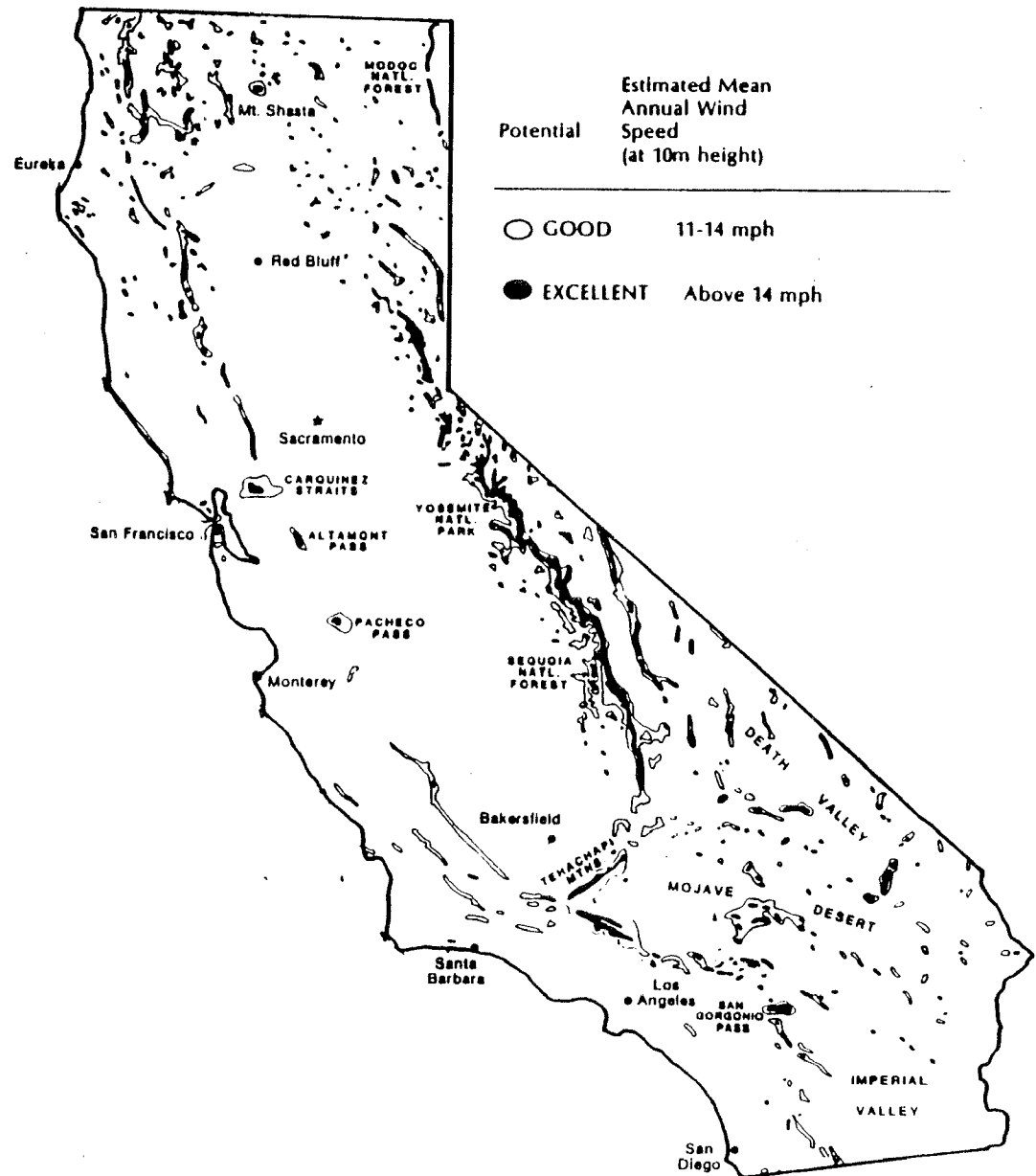
4. CALIFORNIA WIND RESOURCE AREAS

The wind resource map on this page includes the geographic location and quality associated with the major wind resource areas in California. The following six resource areas currently report wind project information:

- Altamont Pass
- Boulevard (resource area in San Diego County not shown on map)
- Carquinez Straits
- Salinas Valley (resource area in Monterey County not shown on map)
- San Geronio Pass
- Tehachapi Pass

Areas designated "good" are roughly equivalent to an estimated mean annual power, at 10 meter height, of 200 to 300 watts per square meter (W/m^2), and "excellent" above $300 W/m^2$.

Source: A. Miller and R. Simon, "Wind Power Potential in California," San Jose State University, prepared for the California Energy Commission, May 1978.



5. STAFF SUMMARY

5.A INDUSTRY PERFORMANCE

Total Capacity. A cumulative capacity of 1,202 megawatts was reported operational during the fourth quarter of 1988 to the WPRS program. Although this total capacity represents substantial growth since the beginning of 1985 when there was just over 500 MW, it also represents a significant decline since the end of 1987 when there was more than 1,300 MW. One probable explanation for this downward trend is the attrition of turbines installed between 1981 and 1985. These turbines were often manufactured and/or installed nastily due to time constraints. This is because investor financing was typically available late in the calendar year, but projects had to be completed by the end of the year to qualify for tax incentives. The authors expect this attrition to continue in the near future.

The total 1988 cumulative capacity does not include a significant amount of capacity that is no longer operating. For a complete list of nonoperating projects see *Appendix A*.

Electricity Output. In 1988, the California wind industry produced approximately 1,818 million kWh of electricity. This is enough power to meet the annual electricity needs of approximately 300,000 typical California homes.

Electricity Production Percent of Projected.

Although the production from California wind projects represents a substantial amount of electricity, the industry as a whole only produced 62% of the total output it projected for 1988.

Both industry observers and participants agree that many wind developers overstated their capabilities and provided projections that were not achievable. Note, however, that the percent of projected has increased 17% since 1985 (45%).

Capacity Factor. Capacity factors are a useful indication of performance. A capacity factor is the ratio of actual energy output to the amount of energy a project would produce if it operated at full rated power, 24 hours a day, over a given time period. As indicated earlier, there should be standardized testing of all wind turbines for capacity factors to be truly comparable, but currently there is no such program. Instead, wind turbine ratings are based on widely varying test conditions and miles per hour specifications. Note, however, the American Wind Energy Association has completed development of voluntary standards for testing wind turbines. Nonetheless, capacity factors are still a good indication of wind project performance. The annual capacity factor is the average of the quarterly capacity factors calculated for each group of turbines reported. Only operating turbines were used to calculate capacity factors so

that the performance results would not be skewed by nonoperational capacity. For projects with new turbines, only half of the new capacity is included in the capacity factor calculation during the quarter of installation. This is because new turbines are not likely to operate for the entire quarter they are installed. In addition, new equipment typically needs a "debugging" period before it operates at full rated power.

The resulting statewide capacity factor for 1988 was 17%. This is substantially below 20 to 30% capacity factors cited for wind turbines in most technical reports but represents a 31% increase over the 13% capacity factor from the first two WPRS years (1985 and 1986), and a 4.6% increase from the 16% capacity factor for 1987. The upper limit capacity factor estimated for wind technology ranges from 30 to 35%. Indeed, one project consistently achieves this upper limit including an annual capacity factor of 33% this year.

The low performance indicated for the industry as a whole is consistent with the low percent of projected electricity production. However, it appears that the statewide average performance may be adversely affected by a substantial number of older turbines that are less reliable and less efficient than the turbines currently being installed. In fact, where wind turbines installed after 1985 could be separately analyzed,

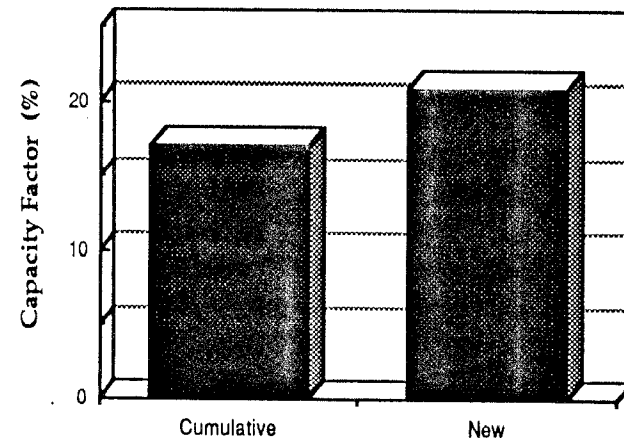


Figure 1: Capacity Factors for New and Cumulative Turbine Stock

the capacity factor was 21%, or 24% higher than the industry as a whole (Figure 1).

Kwh per Square Meter. Annual kWh per square meter calculations provide another good wind technology performance indicator. The advantage of this indicator is that it is based on blade swept area, which is a wind turbine specification determined by standard measurements rather than non-standardized kW ratings used to determine capacity factors. Unfortunately, it is still difficult to develop directly comparable kWh per square meter results. This is because the data reported for some turbine models include new turbines which have not had the benefit of a full operational year. Where any kWh per square meter calculation does not include a full operational year for all turbine, an asterisk has been marked next to the value on all summary tables.

For 1988, the average kWh per square meter annual production was 639 or 9% higher than for 1987 (584). Where turbines installed after 1985 could be isolated, the resulting kWh per square meter increased 19% to 761. (Figure 2)

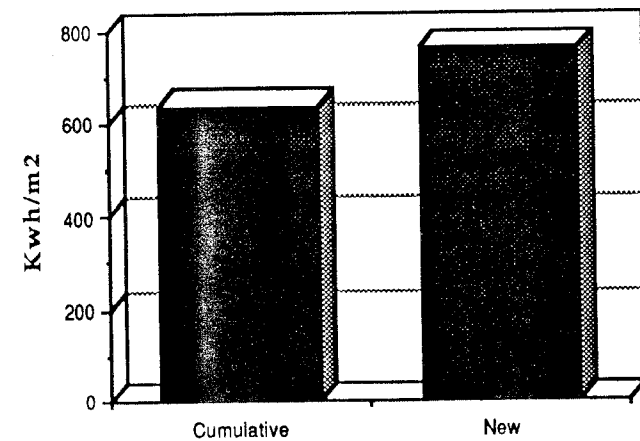


Figure 2: Kwh Per Square Meter Production for New and Cumulative Turbine Stock

5.B INDUSTRY PRODUCTION AND CAPACITY TRENDS

Statewide

The growth rate of wind development has continued to decline in 1988 in response to the expiration of federal and state tax credits at the end of 1985 and 1986 respectively. By the end of 1988, 59 MW of new capacity had been installed. By comparison, almost 400 MW of new capacity was installed in 1985 when developers rushed to take advantage of expiring tax credits. As noted earlier, there was a very high attrition rate in 1988 that substantially exceeded new capacity. This resulted in total cumulative capacity decreasing from 1,304 MW in 1987 to 1,202 MW in 1988 (*Figure 3*).

Wind output in 1988 was consistent with the typical California wind resource profile: low winds at the beginning and end of the year with high winds during spring and summer when the heating season creates a natural draw of cool coastal air into hot valleys and deserts. The data showed that almost 70% of all annual output was produced in the second and third quarters of 1988 (*Figure 4*).

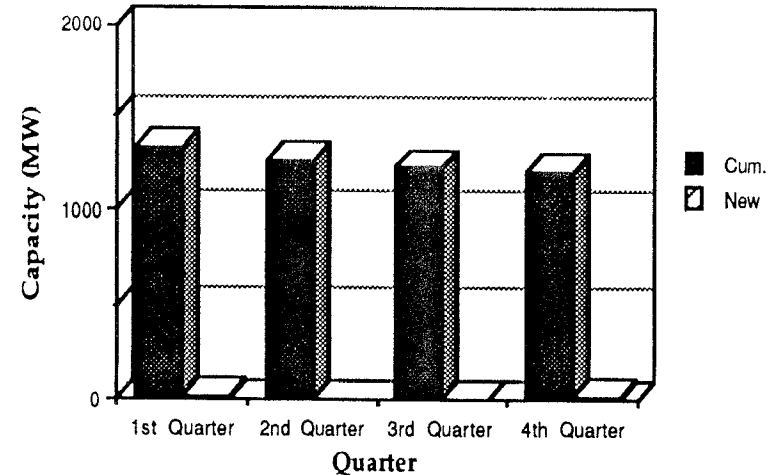


Figure 3: Statewide Wind Capacity

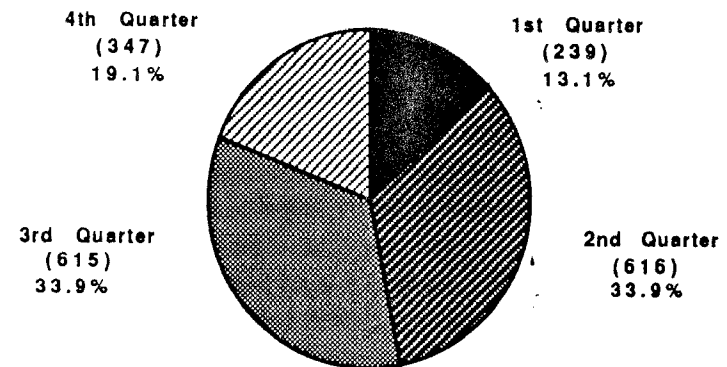


Figure 4: Statewide Wind Output (millions of kWh)

Although total capacity dropped more than 100 MW since 1987, productivity is steadily increasing. Total output in 1988 increased more than 5% since 1987 and 170% since 1985 (*Figure 5*). Quarterly capacity factors were consistent with the California wind resource profile just discussed. The capacity factors were 9, 23, 22, and 12 percent respectively for the first, second, third, and fourth quarters. The total annual capacity factor has increased from previous years (*Figure 6*). The annual average statewide capacity factor for 1988 was 17% compared to 16% for 1987, and 13% for both 1986 and 1985.

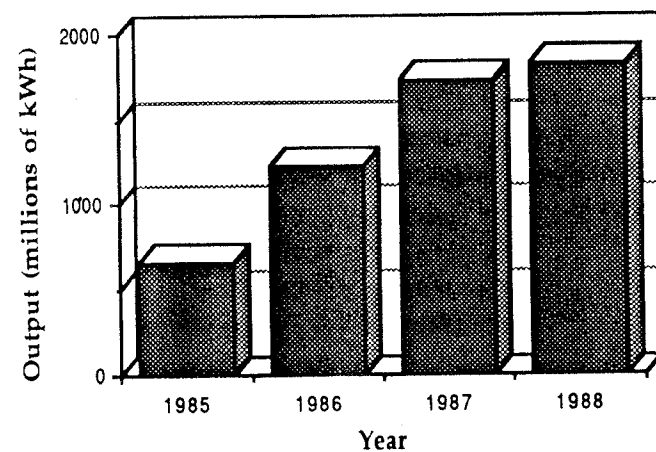


Figure 5: Statewide Wind Output

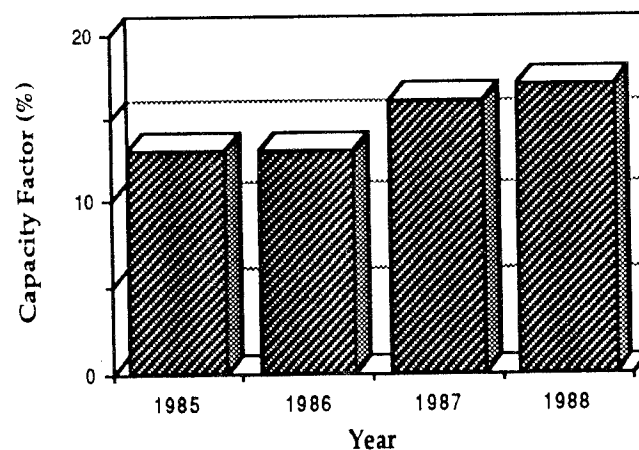


Figure 6: Statewide Capacity Factors

Resource Areas

Although wind projects are reported to WPRS for seven different resource areas in California, virtually 100% of all California capacity and output occurs in three resource areas: Altamont Pass, San Geronio Pass and Tehachapi Pass. All three of these areas are narrow mountain passes leading into hot and dry valley or desert regions. Among these three resource areas, 52% of all capacity is in the Altamont Pass, 17% is in San Geronio Pass and 31% is in Tehachapi Pass (Figure 7). Growth as a percent of existing capacity was highest in Altamont (8%) followed by San Geronio (2%) and Tehachapi (1%). Quantitatively, almost 87% of all new capacity was developed in the Altamont Pass. The kWh output and percent of total statewide output for each resource area shown in Figure 8. Compared with the capacity distribution from Figure 7, Altamont (54% output vs. 52% capacity) and San Geronio (18% output vs. 17% capacity) produced a slightly greater proportion of output and Tehachapi (28% output vs. 31% capacity) produced a slightly lower proportion of output.

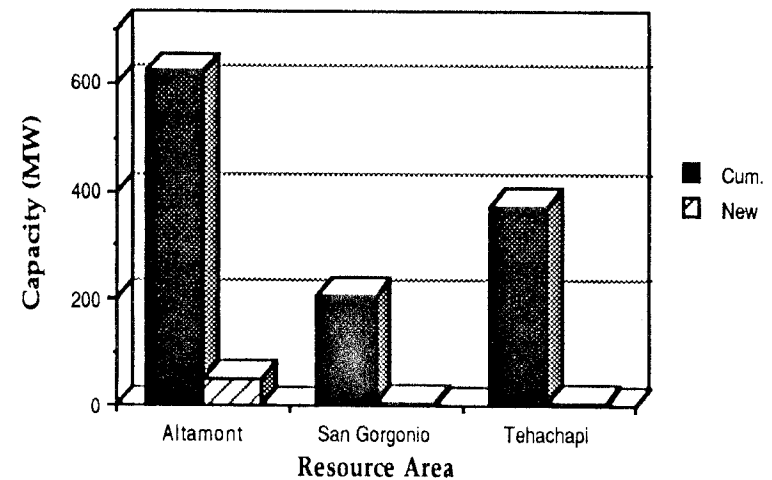


Figure 7: Resource Area Capacity

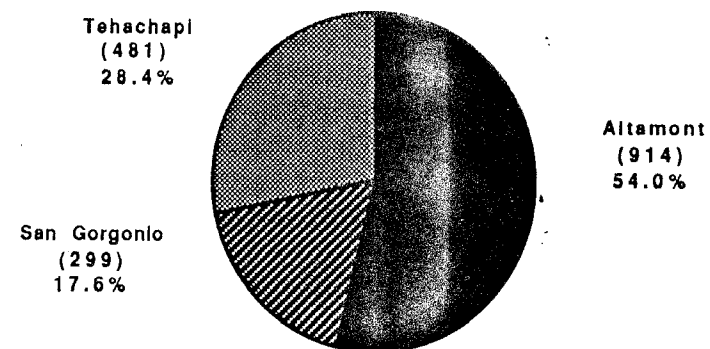


Figure 8: Resource Area Output (millions of kWh)

Among the three largest resource areas, San Gorgonio had the highest capacity factor (20%), followed by Altamont (17%) and Tehachapi (15%) (Figure 9). It is possible that San Gorgonio's higher capacity factor is partly attributed to newer machines in this resource area. This is because many San Gorgonio wind developers met substantial delays getting local government approvals for their projects during early wind development years. In addition, it is important to note that two very large developers significantly impact Altamont's performance with more than 230 MW of capacity with only a 7% average capacity factor.

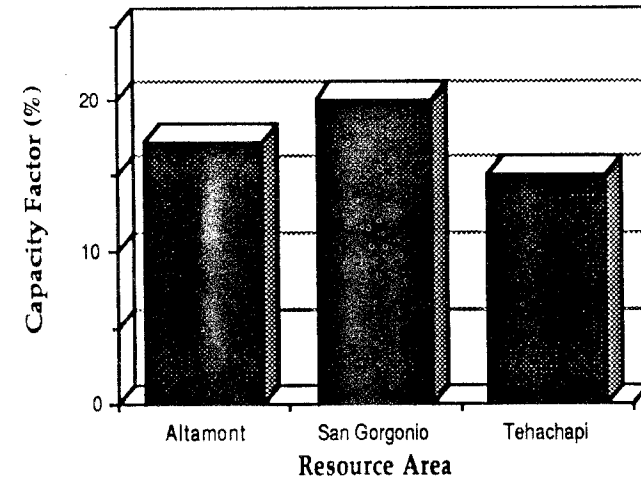


Figure 9: Capacity Factor by Resource Area

Turbine Size

Although many industry specialists predict that turbines in the 300 kW size range will be the trend for future wind development, 1988 data continues to indicate that 51 to 100 kW is still the dominant size category. This turbine size accounted for more than two-thirds of cumulative wind capacity and almost 90% of new capacity (Figure 10). The capacity percentages for all turbine size categories are: 5% for 0-50 kW, 68% for 51-100 kW, 19% for 101-150 kW, 3% for 151-200 kW and 6% for greater than 200 kW. It should be noted that the 51-100 and 101-150 size categories alone accounted for the predominantly share of cumulative capacity (86%).

The capacity factors were significantly higher and most improved for the 151-200 turbine size category (Figure 11). The actual capacity factors by turbine size category were: 16% for 0-50 kW, 17% for 51-100 kW, 17% for 101-150 kW, 22% for 151-200 kW and 11% for greater than 200 kW.

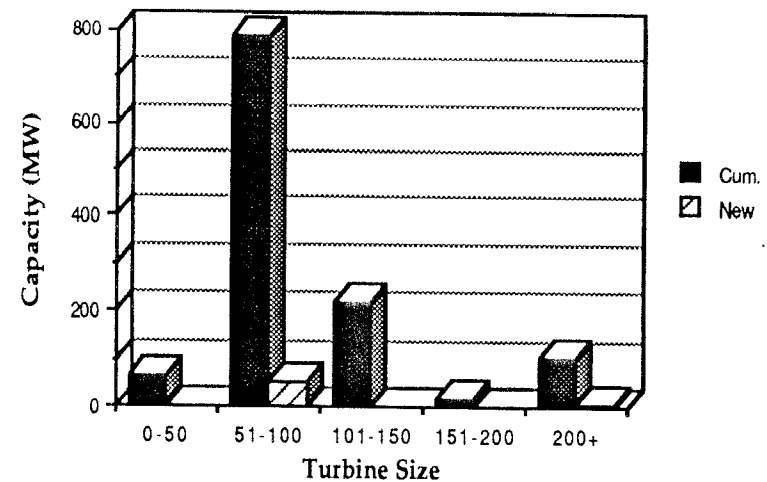


Figure 10: Capacity by Turbine Size

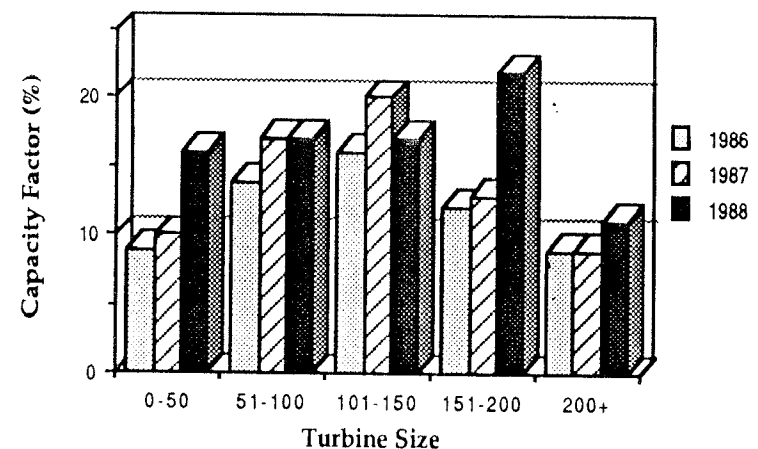


Figure 11: Capacity Factor by Turbine Size

Turbine Types

Based on the data reported, Energy Commission were able to differentiate between horizontal and vertical axis machines, but not other important turbine characteristics such as downwind and upwind configurations, number of blades, and braking devices. The data on turbine axis shows that the California wind industry is clearly dominated by horizontal axis machines which accounted for 95% of all capacity and 100% of new capacity (Figure 12). Comparing performance, horizontal axis turbines had a 70% higher capacity factor than vertical axis turbines (16% v. 10%) (Figure 13).

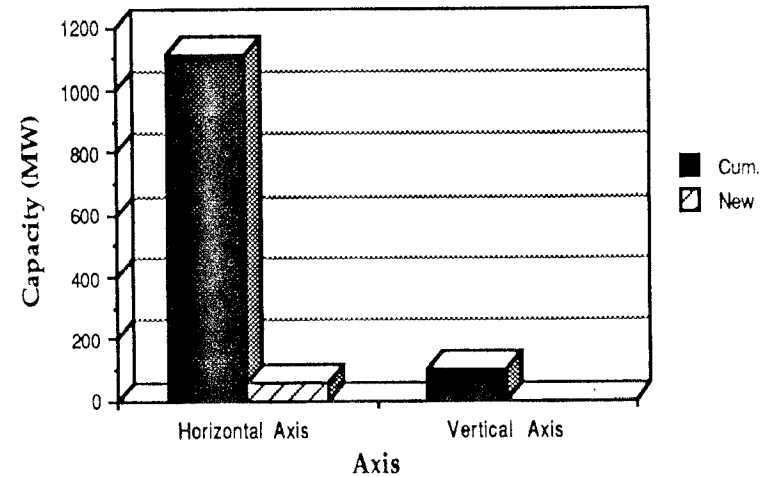


Figure 12: Capacity by Turbine Axis

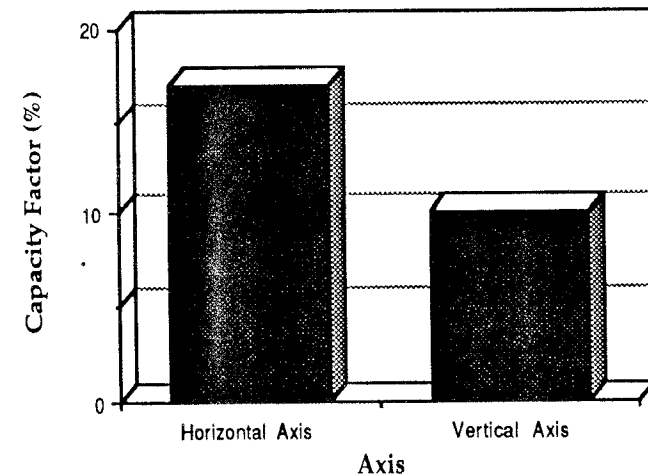


Figure 13: Capacity Factors by Turbine Axis

Similarly, kWh per square meter performance results were also much higher for horizontal axis turbines (639 vs. 535) (*Figure 14*).

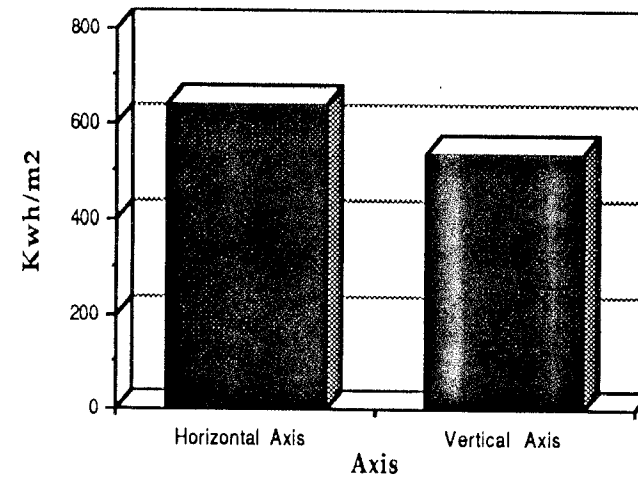


Figure 14: Kwh Per Square Meter Production by Turbine Axis

Domestic and Foreign Turbines

There has been widespread interest in how domestic and foreign turbines compare. At the end of 1988, there were 702 MW of domestic turbine capacity compared to 500 MW of foreign turbine capacity. New capacity was predominantly domestic with 52 megawatts of new capacity compared to 8 megawatts of new foreign capacity (Figure 15). The foreign turbine share of total capacity after increasing from 33% in 1985 to 45% at the end of 1986, has slipped slightly to 44% at the end of 1987 and 42% at the end of 1988. However, new foreign turbine capacity percentage of all new capacity has continually decreased from almost 75% of all new 1986 capacity to 51% of all new 1987 capacity and finally 13% of all new 1988 capacity (Figure 16).

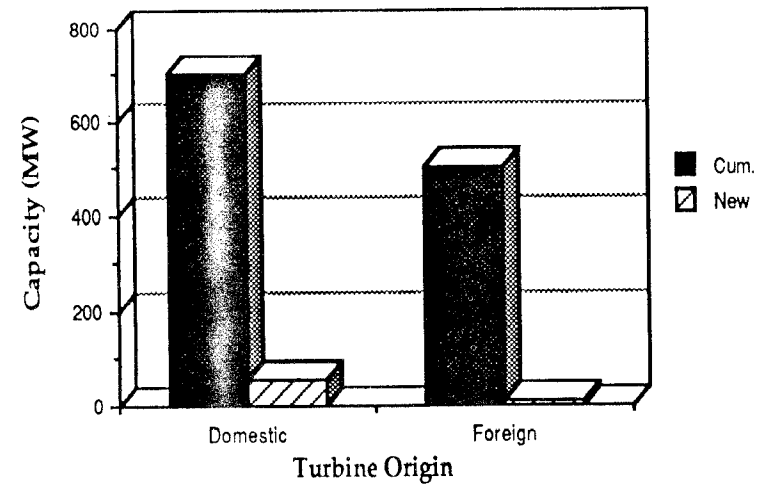


Figure 15: Capacity by Origin

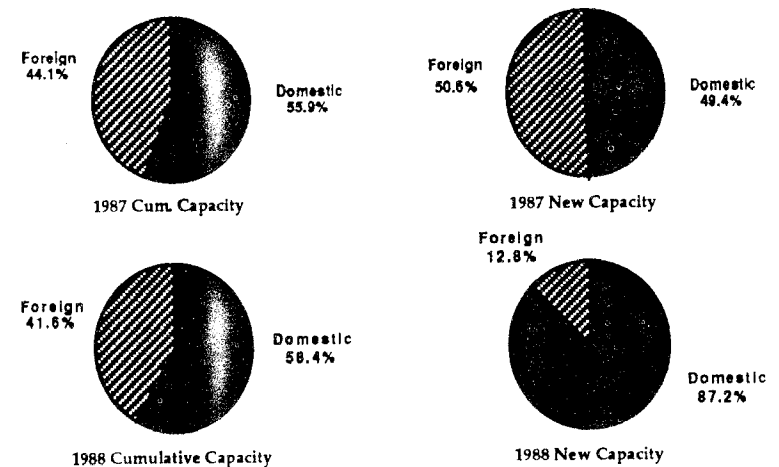


Figure 16: Capacity Distribution by Origin

It is important to note that new foreign turbine capacity since 1985 accounts for approximately 94% of the total foreign capacity while new domestic capacity from this same two year period represents 59% of total domestic capacity. Thus, foreign turbine performance results benefit from considerably newer machines. In addition, two large developers in Altamont Pass have more than 230 megawatts of capacity with only a 7% average capacity factor that brings down domestic turbine performance. As a result, the capacity factor for foreign turbines (18%) was 15% higher than for domestic turbines. However, if the low performing turbines manufactured by the two large operators just mentioned are eliminated from the domestic turbine data-base, the adjusted domestic turbine performance (19%) surpasses foreign turbines (*Figure 17*). When using a kWh per square meter analysis to measure performance, domestic turbines were almost 7% higher than foreign turbines without any adjustments (*Figure 18*). A reason why kWh per square meter performance is comparatively better than capacity factor performance for domestic turbines is that rated capacities appeared to be overstated for domestic turbines, especially the older models.

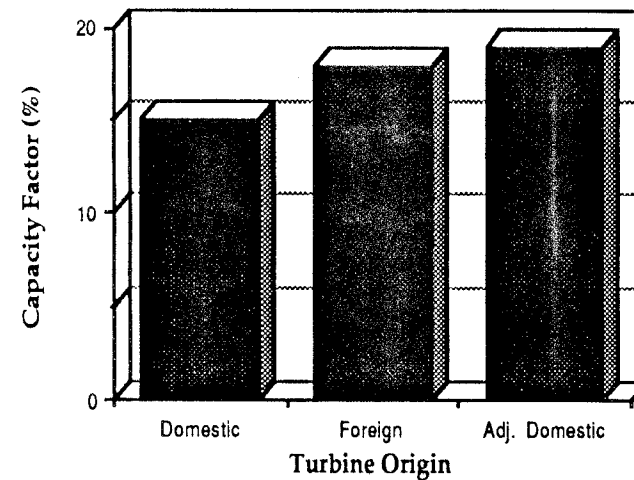


Figure 17: Capacity Factor by Origin

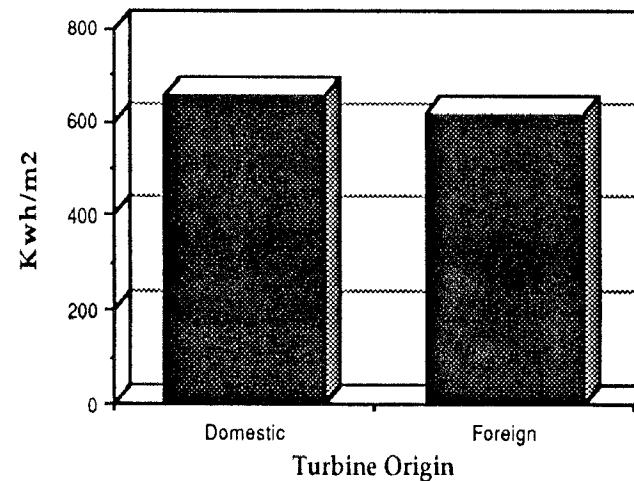


Figure 18: Kwh Per Square Meter Production by Origin

The Ten Largest Wind Turbine Manufacturers

The ten largest wind turbine manufacturers represent almost almost two-third (64%) of the California wind generating capacity. The four largest manufacturers alone (U. S. Windpower, Vestas, Fayette, and Micon) account for 56% of all capacity. The ten largest manufacturers and their individual generating capacities are shown in *Figure 19*. There is a wide range of capacity factors among these manufacturers (*Figure 20*). The manufacturers with the highest capacity factors are Bonus (26%) and U.S. Windpower (22%), followed by Vestas (18%), and Nordtank (17%). It is important to recognize that many factors should be considered when evaluating this data. For instance, U. S. Windpower has a much older turbine base than the foreign machines.

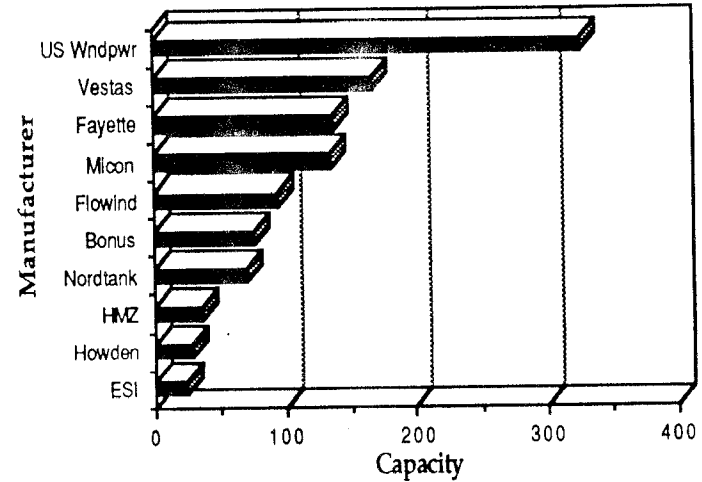


Figure 19: Cumulative Capacity for 10 Largest Turbine Manufacturers

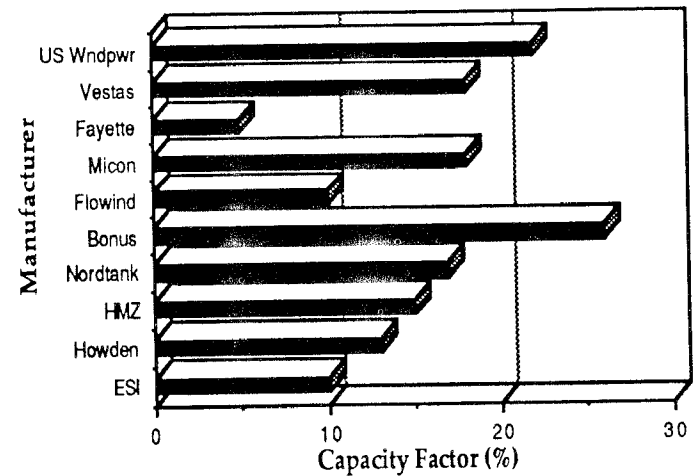


Figure 20: Capacity Factors for 10 Largest Turbine Manufacturers

The annual kWh per square meter results are shown for the ten largest manufacturers in Figure 21. The manufacturers with the best results are Bonus (866), U.S. Windpower (816), HMZ (730) and Vestas (615).

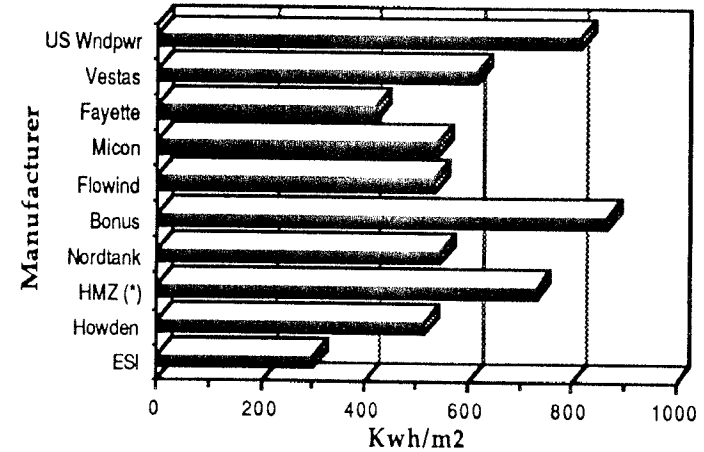


Figure 21: Kwh Per Square Meter Production for 10 Largest Turbine Manufacturers

(*) Estimated value based on data for 2 quarters

The Five Largest Wind Project Operators

Although the ten largest operators used to be evaluated in previous WPRS reports, this report focuses on just the five largest operators due to industry consolidation and growth limited to just major developers. In fact, the five largest wind project operators (U.S. Windpower, Zond, SeaWest, Fayette, and FloWind) represent almost 85% of the total California wind generating capacity (*Figure 22*). Three of these larger project operators are also manufacturers.

Performance for the largest wind project operators, similar to the largest manufacturers, is also quite varied (*Figure 23*). The operators with the highest capacity factors are U.S. Windpower (22%), SeaWest (19%) and Zond (18%). It should also be noted that one smaller operator, San Geronio Farms (not shown in Figures 22 and 23), has consistently produced the highest capacity factors every year WPRS data has been published including 33% for 1988. This project is significant, because it has consistently demonstrated the potential of wind technology performance when developers combine quality machines and a good wind resource site.

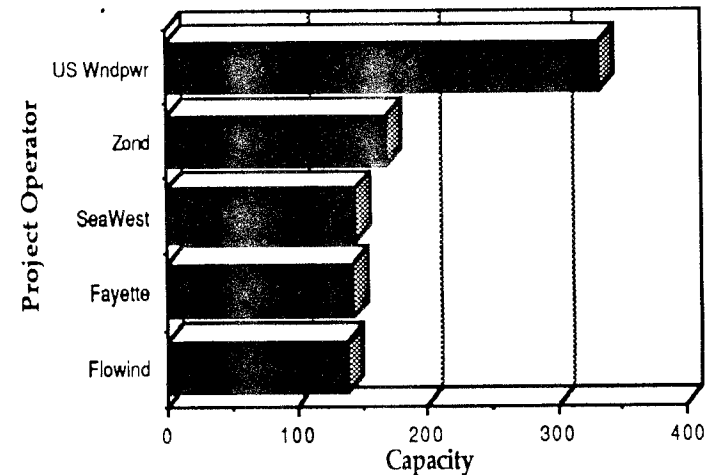


Figure 22: Cumulative Capacity for 5 Largest Project Operators

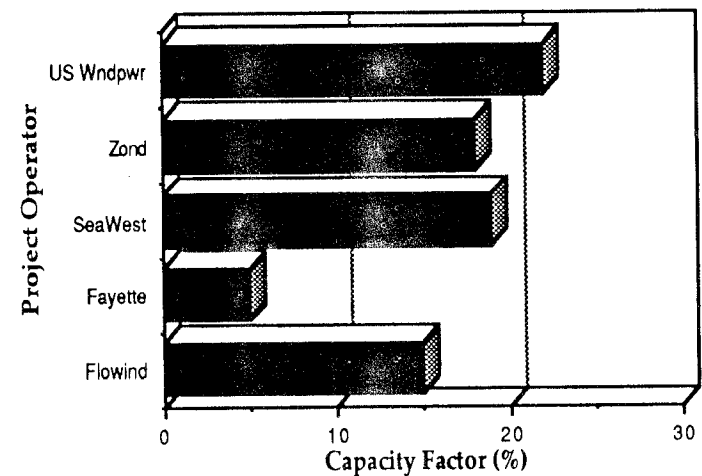


Figure 23: Capacity Factors for 5 Largest Project Operators

Annual kWh per square meter results for the five largest operators are shown in *Figure 24*. Among these operators, U.S. Windpower (820), FloWind (718), Zond (604), and Seawest (586) had the best performance. Note that among all operators, San Gorgonio Farms (not shown on Figure 24) again had the best performance with 1,014 kWh per square meter.

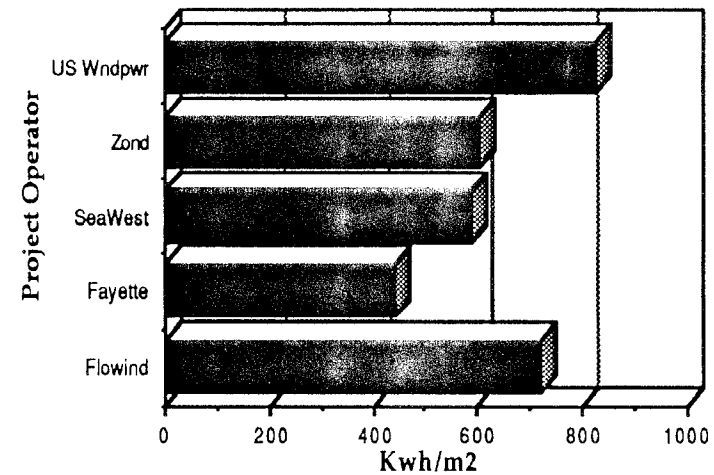


Figure 24: Kwh Per Square Meter Production for 5 Largest Project Operators

5.C TIME-OF-USE PRODUCTION

The time-of-use distribution for wind generated electricity during California utility peak seasonal demand months (May-October) is illustrated in *Figure 25*. This profile is based on tabulated utility billing data supplied by approximately half of the wind operators to verify reported wind production figures. This data indicates that production capabilities for wind facilities in California are poorly matched to time-of-use needs. Specifically, among all electricity produced by wind projects during seasonal peak demand months in 1988, only 11% occurred during "peak" periods with 27% produced during "mid-peak" periods and almost two-thirds (62%) produced during "off-peak" periods. Thus, there is a substantial need for research and development efforts that couples wind systems with existing and emerging energy storage technologies such as pumped hydro, compressed air energy storage and utility battery systems. This work is critical both to improve wind technology economics ("peak" electricity during seasonal high demand periods will generally be more valuable by a factor of three or more than "off-peak" electricity) and to optimize wind facility coordination with utility needs (additional power available during peak periods can help defray the need for additional generation plants or defer operation of the most inefficient utility plants typically used during peak periods). Thus, evaluation of the wind

resource at a specific site should not only consider the average wind speed but also the match between the distribution of wind speeds and the distribution of the utility's load.

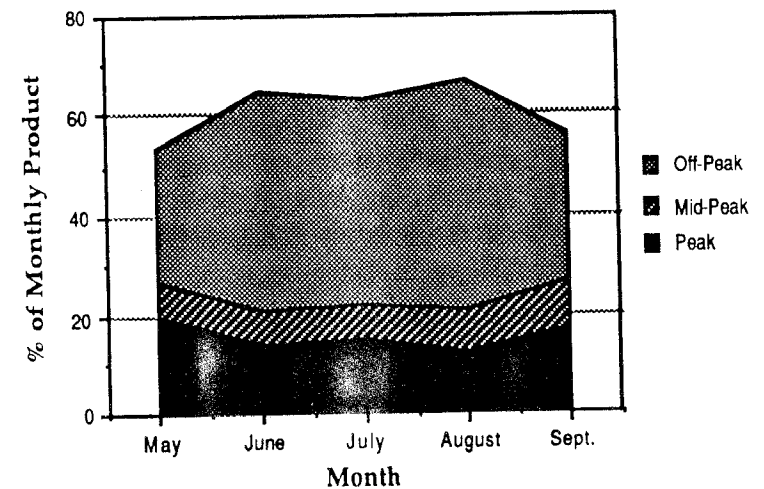


Figure 25: Statewide Time-Of-Use Distribution

6. WPRS ANNUAL SUMMARY TABLES

The tables on the following pages include aggregated data for all wind projects that have submitted 1988 quarterly reports to the California Energy Commission as part of the WPRS program. These tables summarize detailed WPRS data included in Section 7 of this report. In addition to statewide information, the summary tables were designed to provide information for different resource areas, turbine sizes, turbine types, turbine manufacturers, turbine operators, and for domestic and foreign turbines. Note that the totals for the various subcategories may not always add up to the statewide totals because there were a few projects where missing data did not allow all information to be sorted completely.

Also note that kWh per square meter results include an asterisk if some portion of the cumulative turbine capacity being considered includes new turbine capacity that did not operate for a full year. It is important to recognize that the negative impact on performance for most turbine groups noted with an asterisk is minimal unless the new turbine capacity represents a significant percentage of cumulative capacity.

1988 WPRS DATA SUMMARY TABLE

Data Category	Cumulative Capacity (kw)	New Capacity (kw)	Output (kwh)	Actual /Proj. Output (%)	Actual Capacity Factor (%)	Kwh /square meter	Cumulative Turbines	New Turbines
STATEWIDE								
1st Quarter	1,337,524	18,640	239,341,892	56	9	86*	15,305	186
2nd Quarter	1,261,254	2,700	616,121,259	58	23	222*	14,745	15
3rd Quarter	1,229,485	16,050	615,466,265	65	22	212*	13,790	157
4th Quarter	1,201,613	21,880	347,379,536	81	12	114*	13,457	206
1988 Totals	1,201,613	59,270	1,818,308,952	62	17	634*	13,457	564
RESOURCE AREA								
<u>Altamont</u>								
1st Quarter	671,600	17,200	86,378,826	71	6	67*	6,782	162
2nd Quarter	635,090	1,200	294,968,833	63	22	241*	6,613	12
3rd Quarter	652,225	15,800	397,657,941	78	29	311*	6,356	156
4th Quarter	623,400	17,500	135,169,195	115	10	106*	6,062	175
1988 Totals	623,400	51,700	914,174,795	75	17	725*	6,062	505
<u>San Geronio</u>								
1st Quarter	246,902	1,440	39,535,296	50	11	90*	3,766	24
2nd Quarter	221,662	1,500	114,851,242	57	34	262*	3,528	3
3rd Quarter	204,898	0	83,095,580	42	19	146	3,309	0
4th Quarter	205,678	780	61,231,297	82	14	107*	3,322	13
1988 Totals	205,678	3,720	298,713,415	54	20	605*	3,322	40
<u>Tehachapi</u>								
1st Quarter	416,927	0	105,883,407	48	12	109	4,691	0
2nd Quarter	402,407	0	168,635,558	52	20	181	4,538	0
3rd Quarter	370,267	250	92,790,753	49	12	108*	4,059	1
4th Quarter	370,444	3,600	113,358,024	54	14	132*	4,007	18
1988 Totals	370,444	3,850	480,667,742	51	15	530*	4,175	19

1988 WPRS DATA SUMMARY TABLE

Data Category	Cumulative Capacity (kw)	New Capacity (kw)	Output (kwh)	Actual /Proj. Output (%)	Actual Capacity Factor (%)	Kwh /square meter	Cumulative Turbines	New Turbines
TURBINE SIZE								
<u>0 - 50 kw</u>								
1st Quarter	99,960	0	12,132,695	36	10	71	2,771	0
2nd Quarter	101,035	0	30,669,110	54	25	178	2,813	0
3rd Quarter	84,065	0	23,675,787	53	18	129	2,435	0
4th Quarter	63,035	0	15,550,921	65	12	87	2,011	0
1988 Totals	63,035	0	82,028,513	52	16	465	2,011	0
<u>51 - 100 kw</u>								
1st Quarter	838,954	17,140	146,756,599	56	8	81*	9,948	181
2nd Quarter	802,804	1,200	405,455,555	60	24	231*	9,532	12
3rd Quarter	761,410	15,500	393,321,154	69	24	230*	8,881	155
4th Quarter	787,625	18,280	203,469,820	91	12	115*	9,124	188
1988 Totals	787,625	52,120	1,149,003,128	69	17	657*	9,124	536
<u>101 - 150 kw</u>								
1st Quarter	231,628	0	50,798,420	67	12	110	1,906	0
2nd Quarter	233,083	0	103,745,935	67	24	224	1,918	0
3rd Quarter	221,828	0	94,648,131	56	19	175	1,816	0
4th Quarter	222,071	0	67,312,299	72	14	124	1,818	0
1988 Totals	222,071	0	316,504,785	64	17	633	1,818	0
<u>151 - 200 kw</u>								
1st Quarter	45,360	0	8,074,035	55	8	89	245	0
2nd Quarter	17,960	0	12,062,055	64	36	303	108	0
3rd Quarter	45,760	0	23,126,650	73	24	252	247	0
4th Quarter	21,960	0	7,441,193	57	20	153	128	0
1988 Totals	21,960	0	50,703,933	65	22	797	185	0

1988 WPRS DATA SUMMARY TABLE

Data Category	Cumulative Capacity (kw)	New Capacity (kw)	Output (kwh)	Actual /Proj. Output (%)	Actual Capacity Factor (%)	Kwh /square meter	Cumulative Turbines	New Turbines
TURBINE SIZE								
<u>200+ kw</u>								
1st Quarter	121,622	1,500	14,273,926	43	7	84*	435	5
2nd Quarter	106,372	1,500	26,888,063	35	12	160*	374	3
3rd Quarter	116,422	550	39,119,704	62	16	212*	411	2
4th Quarter	106,922	0	16,127,498	50	7	97	376	0
1988 Totals	106,922	3,550	96,409,191	47	11	503	376	10
TURBINE AXIS								
<u>Horizontal Axis</u>								
1st Quarter	1,242,689	18,640	215,094,115	56	9	84*	17,793	186
2nd Quarter	1,166,419	2,700	550,139,074	59	24	224*	14,233	15
3rd Quarter	1,134,770	16,050	553,546,647	66	23	216*	13,279	157
4th Quarter	1,106,898	21,880	296,117,368	84	12	115*	12,946	206
1988 Totals	1,106,898	59,270	1,614,897,204	63	17	639*	12,946	564
<u>Vertical Axis</u>								
1st Quarter	94,835	0	16,941,560	51	8	113	512	0
2nd Quarter	94,835	0	28,681,644	45	14	192	512	0
3rd Quarter	94,715	0	20,344,779	52	10	137	511	0
4th Quarter	94,715	0	13,784,354	46	7	93	511	0
1988 Totals	94,715	0	79,752,337	48	10	535	511	0

1988 WPRS DATA SUMMARY TABLE

Data Category	Cumulative Capacity (kw)	New Capacity (kw)	Output (kwh)	Actual /Proj. Output (%)	Actual Capacity Factor (%)	Kwh /square meter	Cumulative Turbines	New Turbines
TURBINE MANUFACTURERS 1988 TOTALS								
Aeroman (Ger)	11,320	0	17,114,550	-	17	492	283	0
Airmaster (USA)	1,000	0	0	-	-	-	10	0
Blue Max (USA)	3,200	0	1,144,083	19	4	147	80	0
Bonus (Den)	76,545	0	196,529,726	82	26	866*	799	0
Bouma (Neth)	4,860	0	567,940	-	1	51	36	0
Carter (USA)	10,600	0	6,886,640	24	7	257	298	0
Century (USA)	9,275	0	1,350,903	-	3	262	109	0
Danwin (Den)	17,310	0	36,591,795	59	24	803	116	0
Dynergy (USA)	14,544	0	0	-	-	-	171	0
ESI (USA)	24,060	0	18,473,332	30	10	299	354	0
Enertech (USA)	20,510	0	42,550,152	72	24	614	485	0
Fayette (USA)	137,270	0	57,355,023	29	5	423	1,370	0
Floda (Aust)	1,500	0	2,058,480	58	30	674*	3	3
Flowind (USA)	94,715	0	79,752,337	48	10	536	511	0
HMZ (Belgium)	37,300	1,500	24,579,999	86	15	730	174	5
Howden (Scot)	28,410	0	32,508,049	61	13	514	93	0
Jacobs (USA)	11,705	0	19,348,442	70	19	610	630	0
Lolland (Den)	7,075	0	1,606,632	40	10	-	71	0
MWT (Japan)	5,000	0	9,754,468	75	22	993	20	0
Micon (Den)	134,279	250	173,971,940	49	18	541*	1,521	1
Nordtank (Den)	71,495	2,220	115,960,170	67	17	544*	840	37
Polenko (Neth)	1,500	0	2,099,151	43	13	449	15	0
Starwind (USA)	625	0	110,027	-	3	-	5	0
Strm Mstr (USA)	6,680	0	2,124,315	15	4	152	167	0
Sumitomo (Japan)	200	0	332,630	-	19	916	1	0
US Wndpwr (USA)	327,200	49,900	553,276,801	90	22	816*	3,272	499
Vanguard (USA)	5,700	0	780,000	-	6	-	60	0
Vestas (Den)	166,280	3,600	263,095,993	54	18	615*	2,044	18
WEG (Eng)	5,300	300	11,147,786	86	25	1,087*	21	1
Wecs-Tec (USA)	1,985	0	0	-	-	-	30	0
Wenco (Switz)	2,800	0	8,730	-	-	-	14	0
Wincon (USA)	1,944	0	2,834,105	56	16	537	18	0
Windane (USA)	560	0	501,996	-	10	249	14	0
Windmatic (Den)	15,720	0	18,533,849	61	13	448	198	0
Windtech (USA)	9,750	0	350,125	-	1	16	130	0

1988 WPRS DATA SUMMARY TABLE

Data Category	Cumulative Capacity (kw)	New Capacity (kw)	Output (kwh)	Actual /Proj. Output (%)	Actual Capacity Factor (%)	Kwh /square meter	Cumulative Turbines	New Turbines
PROJECT OPERATORS 1988 TOTALS								
Altamont Energy	-	-	25,108,645	-	-	-	-	-
Alt.-Amer. Partners	-	-	311,280	-	-	-	-	-
Amer. Divers.	24,730	0	43,482,939	71	20	-	374	0
Amer. Power Sys.	3,705	0	6,667,454	82	20	626	204	0
Arbutus	22,325	0	26,339,500	54	13	399	335	0
Buckeye	660	0	375,584	34	6	160	30	0
CTV	11,320	0	17,114,550	-	17	492	283	0
Cannon	77,438	250	85,907,103	-	14	492*	869	1
Casas del Sol	160	0	44,500	16	4	-	4	0
Dollar Energy	4,220	0	1,585,200	28	5	-	76	0
Energy Unlimited	4,915	0	7,562,700	64	18	595	91	0
Energy 21	500	0	229,200	-	7	-	20	0
En. Dev. & Con.	-	-	462,000	-	-	-	-	-
Fayette	142,754	0	66,375,829	31	5	444	1,418	0
Flowind	139,440	0	190,690,516	68	15	718	862	0
Howden	28,410	0	32,508,049	61	13	514	93	0
Liberty Windfarms	3,200	0	1,144,083	19	4	147	80	0
Natural Resource Ven.	8,710	0	14,220,000	60	18	528	134	0
OESC	3,400	0	7,773,711	68	26	649	85	0
Oak Creek	32,630	0	19,911,196	45	11	-	489	0
Ren. Energy Ven.	17,080	0	21,304,800	46	14	458	376	0
Richard Immel	150	0	124,805	-	9	152	6	0
San Gorg. Farms	16,010	1,500	44,992,418	70	33	1,014*	205	3
Sandberg	-	-	31,404,000	-	-	-	-	-
SeaWest	144,504	0	189,287,931	54	19	586	1,603	0
So. Cal. Sunbelt	17,610	0	16,098,222	72	13	483	188	0
TERA	8,620	0	2,751,427	10	4	115	146	0
Triad Amer. En.	31,480	0	8,842,402	-	4	-	293	0
U.S. Windpower	332,500	50,200	564,424,587	90	22	820*	3,293	500
Western Wind	3,351	0	5,292,724	59	18	560	37	0
Wind Farms Man.	-	-	230,000	-	-	-	-	-
Wind Gen. Parks	250	0	319,800	75	19	963	1	0
Windland	11,325	3,600	7,157,837	33	11	-	111	18
WindMaster	37,300	1,500	46,609,085	86	15	-	174	5
Windridge	-	-	3,364,000	-	-	-	-	-
Windustries	6,720	0	14,440,297	66	26	694	144	0
Wintec	24,636	2,220	46,795,222	65	22	650*	646	37
Zond	168,795	0	267,055,656	53	18	604	2,148	0

1988 WPRS DATA SUMMARY TABLE

Data Category	Cumulative Capacity (kw)	New Capacity (kw)	Output (kwh)	Actual /Proj. Output (%)	Actual Capacity Factor (%)	Kwh /square meter	Cumulative Turbines	New Turbines
DOMESTIC AND FOREIGN TURBINES 1988 TOTALS								
<u>Domestic Turbines</u>								
1st Quarter	720,524	15,700	85,079,404	59	6	70*	8,491	157
2nd Quarter	716,589	2,700	290,751,208	59	21	228*	8,502	15
3rd Quarter	697,560	15,800	333,952,287	71	23	253*	8,063	156
4th Quarter	701,965	17,500	141,688,051	91	10	103*	7,869	175
1988 Totals	701,965	51,700	851,470,950	64	15	654*	7,869	503
<u>Foreign Turbines</u>								
1st Quarter	617,000	2,940	146,956,271	53	12	99*	6,814	29
2nd Quarter	544,665	0	288,069,510	58	26	217	6,243	0
3rd Quarter	531,925	250	239,939,139	71	20	172*	5,727	1
4th Quarter	499,648	4,380	168,213,671	49	15	126*	5,588	31
1988 Totals	499,648	7,570	843,178,591	58	18	614*	5,588	61

7. WPRS DATA

This section of the report includes WPRS 1988 project data as submitted by wind project operators for all four quarters. In addition, totals are shown for the entire year. The data are organized into separate sections for each resource area. Operators are listed alphabetically within each resource area section and numbered sequentially through this entire WPRS Data section. The following alphabetical listing of wind project operators and participants is keyed to these sequential numbers for quick access to specific wind industry data. *Appendix B* includes a list of all turbine manufacturers also keyed to these sequential numbers. After the operator listing, notes are provided that describe how data are reported. As mentioned earlier, it is important to remember that these data only represent performance results for one year and should not be used as the sole basis for evaluating wind projects.

Alphabetical Listing of Wind Project Operators and Participants

The following alphabetical listing includes all operators and other participants involved in wind projects that reported 1988 data to the WPRS program. The number in parentheses following each operator and other participant refers to the sequential number location in this section.

Altamont-Amer. Partners	(1A)	Renewable Energy Ventures	(21A-B)
Altamont Energy Corp.	(2A)	Richard Immel Wind Farm	(13A)
Altech Energy Ltd.	(7A)	San Gorgonio Farm	(22A)
Altech Energy Ltd., II	(20A)	Sandberg Wind Corp.	(23A)
Amer. Diversified Cap. Corp.	(3A-B)	SeaWest	(3A, 7A-G, 12A,24A-C, 40A)
Amer. Power Systems	(17A)	Southern Cali. Sunbelt	(25A, 41A)
Arbutus	(31A)	TaxVest Wind Farms	(7E-F)
Buckeye International	(12A)	TERA Corp.	(8A)
Cali. Wind Energy Sys.	(7C)	Triad American Energy	(26A, 42A)
Cannon Financial Group	(32A-B)	U.S. Windpower	(9A-E)
Casas Del Sol	(16A)	Viking-Energy 83 Ltd.	(7G)
CCC Alter. Energy Venture	(17A)	Western Windfarms	(7B, 27A)
Coram Energy Group	(33A-D)	Wind Farms Mgmnt.	(43A)
Dollar Energy Sys. Corp.	(34A)	Wind Generator Parks, Inc.	(14A)
Energy Devel. & Construc. Co.	(18A)	Windland	(42A, 44A-B)
Energy Conversion Tech.	(33A-D)	WindMaster	(10A)
Energy 21, Inc.	(15A)	Windridge, Inc.	(45A)
Energy Unlimited, Inc.	(19A, 35A)	Windustries	(28A)
Fayette	(4A-I)	Wintec, Ltd.	(29A-F)
Flowind Corp.	(5A-B, 36A-B)	Zond Systems, Inc.	(11A, 30A-B, 46A-K)
Grant Line Energy Corp.	(2A)		
Howden Wind Parks, Inc.	(6A)		
Liberty Windfarms	(37A)		
Natural Resource Ventures	(38A)		
Oak Creek Energy Systems	(39A)		
O.E.S.C.	(20A)		
PanAero Corp.	(30B)		
Phoenix Energy, Ltd.	(24C)		

WIND DATA SECTION NOTES

Definitions for most of the wind data categories used in this section are provided in the WPRS regulations included in Appendix C. The discussion below includes other important notes on how data is reported in this section as well as points of clarification.

Data missing. Some operators have submitted incomplete reporting forms. In these cases, the items not completed have been noted as "data missing." It should be noted that operators with missing data are in violation of WPRS regulations.

Electricity Produced. Individual turbine model outputs submitted by wind operators are included for each quarter along with the annual total. In addition, the annual total for the entire project follows after the data for the individual turbine models. Note that the individual turbine model outputs may not always add up to the total project output. This is because individual turbine production is usually read from meters owned by project operators, whereas the total project output is measured from utility substation meters. Line losses and calibration differences between meters should account for these differences. The validation status of output data is noted in the parentheses next to the quarter output reported for each turbine model: "V" indicates that the data has either

been validated by utility billings supplied by the operator or matched utility reported outputs; "NV" indicates operator data was not validated because it did not match any utility billings or utility reported quarterly data, and "UD" indicates that an operator did not report required WPRS information and that the output data comes from data in utility submitted quarterly reports.

Failed to File. Commission staff identified wind project operators that have not reported data but according to utility reports should have participated in the WPRS program. These operators were subsequently notified by mail of the WPRS requirements. Commission staff listed these operators with an indication that they "failed to file" if after sending notification, the identified operators either still did not respond, or did not provide an explanation as to why they were not required to participate in the WPRS program.

Other Participant(s). In some cases other participants in addition to the listed project operator may be involved in a project. These other participants could include project managers, joint venture partners, wind developers using another developer's site, etc.

Projected Quarterly Production Per Turbine. The total quarterly projected production for a specific turbine model can be determined by multiplying the "Projected Quarterly Production Per Turbine" times the "Cumulative Number of Turbines" for that turbine model. The total quarterly projected production for an entire project can be calculated by adding the projected production totals for all turbine models in a project. Comparing this total projected production to the total project "Electricity Produced" indicate how close a specific project came to meeting its projected output. When making this comparison, note any new capacity would not have had the benefit of a full operational quarter for the quarter they were installed.

Rotor (M²). The diameter of the rotor swept area for each wind turbine allows different wind systems to be compared independent of wind resource area. Theoretically, the power available for any wind turbine is proportional to the square of the diameter of the rotor swept area. Thus, doubling the size of the rotor diameter should increase the power output by a factor of four.

Size (kw). For each turbine model listed, the kw size rating is followed by a miles per hour (mph) specification noted in parentheses. As noted earlier, these mph specifications vary widely for different turbine models because there is no standardized rating method.

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis	(M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)	Turbines Installed		Electricity Produced (kwh)	
							New	Cum.		
=====										
ALTAMONT PASS										

(Alameda and Contra Costa)										
1. ALTAMONT-AMERICAN PARTNERS										
5755 Oberlin Drive										
Suite 200										
San Diego, CA 92121										
A. Altamont-American Partners	FAILED TO FILE				1				14,160 (UD)	
	FAILED TO FILE				2				64,080 (UD)	
	FAILED TO FILE				3				182,640 (UD)	
	FAILED TO FILE				4				50,400 (UD)	
=====									311,280	
Project Total:									=====	
=====										
2. ALTAMONT ENERGY CORP.										
337 Preston Court										
Livermore, CA 94550-9678										
A. Jess Ranch and Souza Ranch	FAILED TO FILE				1				2,840,857 (UD)	
Other Participant:	FAILED TO FILE				2				8,709,168 (UD)	
Grant Line Energy Corp.	FAILED TO FILE				3				7,258,199 (UD)	
	FAILED TO FILE				4				6,300,421 (UD)	
=====									25,108,645	
Project Total:									=====	
=====										
3. AMERICAN DIVERSIFIED CAPITAL CORP.										
523 N. 6th St.										
Suite 400										
Los Angeles, CA 90014										
A. American Diversified Wind	Polenko	(H)	302	100 kw @	29 mph	1	7,900	0	12	203,777 (NV)
Other Participant:	Partners					2	7,900	0	12	0 (NV)
Seawest Energy						3	FAILED	TO	FILE	17,308,800 (UD)*
						4	FAILED	TO	FILE	6,507,000 (UD)*
						Annual	15,800			24,019,577

* Output for this "Failed To File" project is included only under the first listed turbine model of the first listed project.

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)	Turbines Installed New	Cum.	Electricity Produced (kwh)

ALTAMONT PASS								

(Alameda and Contra Costa)								
AMERICAN DIVERSIFIED CAPITAL CORP. (Con't.)								
A. American Diversified Wind Partners, Con't.	Windmatic 14-65 (H)	184	65 kw @	35 mph	1 6,090	0 26	144,693 (NV)	
					2 6,090	0 26	0 (NV)	
					3 FAILED	TO FILE	- *	
					4 FAILED	TO FILE	- *	
					-----		-----	
				Annual	12,180		144,693	
=====								
Project Total:								24,164,270
=====								
B. Windfarm II	Bonus 65	(H) 181	65 kw @	38 mph	1 21,885	0 211	2,871,035 (V)	
					2 57,088	0 211	9,966,450 (V)	
					3 FAILED	TO FILE	- *	
					4 FAILED	TO FILE	- *	
					-----		-----	
				Annual	78,973		12,837,485	

	Nordtank 65/13 (H)	201	65 kw @	35 mph	1 24,170	0 125	1,114,165 (V)	
					2 63,050	0 125	5,367,019 (V)	
					3 FAILED	TO FILE	- *	
					4 FAILED	TO FILE	- *	
					-----		-----	
				Annual	87,220		6,481,184	
=====								
Project Total:								19,318,669
=====								

* Output for this "Failed To File" project is included only under the first listed turbine model of the first listed project.

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project

ALTAMONT PASS

(Alameda and Contra Costa)

4. FAYETTE
P.O. Box 1149
Tracy, CA 95378

A. Castello Windranch

Turbine Model	Axis	Rotor (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)	Turbines Installed		Electricity Produced (kwh)
						New	Cum.	

Fayette 95IIS	(H)	95	95 kw @ 37 mph	1	7,000	0	8	16,473 (V)
				2	64,400	0	8	85,263 (V)
				3	61,600	0	8	164,659 (V)
				4	7,000	0	8	43,340 (V)
					-----			-----
				Annual	140,000			309,735
=====								
Project Total:								309,735
=====								

B. Fayette Wind Farms

Bonus 120/20	(H)	296	120 kw @ 34 mph	1	15,000	0	14	286,288 (V)
				2	138,000	0	14	1,052,579 (V)
				3	132,000	0	14	1,245,767 (V)
				4	15,000	0	14	412,242 (V)
					-----			-----
				Annual	300,000			2,996,876

Fayette 400kw	(H)	374	400 kw @ 44 mph	1	30,000	0	2	0 (V)
				2	276,000	0	2	0 (V)
				3	264,000	0	2	0 (V)
				4	30,000	0	2	0 (V)
					-----			-----
				Annual	600,000			0

Fayette 75IIS	(H)	85	75 kw @ 40 mph	1	6,000	0	19	30,402 (V)
				2	55,200	0	19	156,656 (V)
				3	52,800	0	13	208,088 (V)
				4	6,000	0	10	38,562 (V)
					-----			-----
				Annual	120,000			433,708

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis	Rotor (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production		Turbines Installed		Electricity Produced (kwh)
						Per Turbine (kwh)		New	Cum.	
ALTAMONT PASS										
(Alameda and Contra Costa)										
4. FAYETTE (Con't.)										
B. Fayette Wind Farms, Con't.	Fayette 751S	(H)	85	75 kw @	48 mph	1	5,000	0	4	8,788 (V)
						2	46,000	0	4	32,102 (V)
						3	44,000	0	4	30,889 (V)
						4	5,000	0	4	6,702 (V)
						Annual	100,000			78,481
	Fayette 9511S	(H)	95	95 kw @	37 mph	1	7,000	0	1090	2,825,836 (V)
						2	64,400	0	1089	16,984,741 (V)
						3	61,600	0	1079	23,385,486 (V)
						4	7,000	0	1069	5,235,983 (V)
						Annual	140,000			48,432,046
	Micon M110/US	(H)	293	108 kw @	33 mph	1	15,000	0	8	135,905 (V)
						2	138,000	0	8	468,453 (V)
						3	132,000	0	8	477,706 (V)
						4	15,000	0	8	108,278 (V)
						Annual	300,000			1,190,342
	Project Total:									53,131,453
C. Wind Energy Technology Associates II (WETA II)	Fayette 400kw	(H)	374	400 kw @	44 mph	1	30,000	0	23	0 (V)
						2	276,000	0	23	563 (V)
						3	264,000	0	23	18,590 (V)
						4	30,000	0	23	13,441 (V)
						Annual	600,000			32,594

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project -----	Turbine Model -----	Rotor Axis -----	Rotor (M2) -----	Size (kw) -----	Quarter; Annual -----	Projected Quarterly Production		Turbines Installed		Electricity Produced
						Per Turbine (kwh) -----	New	Cum.	(kwh) -----	
ALTAMONT PASS ----- (Alameda and Contra Costa)										
4. FAYETTE (Con't.)										
C. Wind Energy Technology Associates II (WETA II), Con't.	Fayette 95IIS	(H)	95	95 kw @ 37 mph	1	7,000	0	33	94,193 (V)	
					2	64,400	0	33	690,432 (V)	
					3	61,600	0	33	860,077 (V)	
					4	7,000	0	33	139,626 (V)	
					Annual		140,000		1,784,328	
					Project Total:				1,816,922	
D. Wind Energy Technology Associates III (WETA III)	Bonus 120/20	(H)	296	120 kw @ 29 mph	1	15,000	0	11	247,806 (V)	
					2	138,000	0	11	833,489 (V)	
					3	132,000	0	11	973,623 (V)	
					4	15,000	0	11	324,910 (V)	
					Annual		300,000		2,379,828	
					Fayette 95IIS	(H)	95	95 kw @ 37 mph	1	7,000
2	64,400	0	19	315,246 (V)						
3	61,600	0	19	416,556 (V)						
4	7,000	0	19	122,767 (V)						
Annual		140,000		913,388						
Micon M110/US	(H)	293	108 kw @ 33 mph	1					15,000	0
				2	138,000	0	15	937,980 (V)		
				3	132,000	0	15	991,967 (V)		
				4	15,000	0	15	252,157 (V)		
				Annual		300,000		2,453,760		
				Project Total:				5,746,976		

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project -----	Turbine Model	Rotor Axis (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)		Turbines Installed New Cum.		Electricity Produced (kwh)
ALTAMONT PASS ----- (Alameda and Contra Costa)									
4. FAYETTE (Con't.)									
E. Wind Energy Partners I	Fayette 7511S	(H) 85	75 kw @	40 mph	1	6,000	0	30	35,500 (V)
					2	55,200	0	30	205,064 (V)
					3	52,800	0	30	334,855 (V)
					4	6,000	0	30	79,111 (V)
					Annual	120,000			654,530
					Project Total:				654,530
F. Wind Energy Partners II	Fayette 7511S	(H) 85	75 kw @	40 mph	1	6,000	0	78	105,684 (V)
					2	55,200	0	78	651,989 (V)
					3	52,800	0	78	886,400 (V)
					4	6,000	0	78	216,939 (V)
					Annual	120,000			1,861,012
					Project Total:				1,861,012
G. Wind Energy Partners III	Fayette 7511S	(H) 85	75 kw @	40 mph	1	6,000	0	10	21,340 (V)
					2	55,200	0	10	53,225 (V)
					3	52,800	0	10	52,760 (V)
					4	6,000	0	10	13,115 (V)
					Annual	120,000			140,440
	Fayette 9511S	(H) 95	95 kw @	37 mph	1	7,000	0	23	43,518 (V)
					2	64,400	0	23	256,782 (V)
					3	61,600	0	23	311,742 (V)
					4	7,000	0	23	83,846 (V)
					Annual	140,000			695,888
					Project Total:				836,328

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis (M2)	Size (kW)	Quarter; Annual	Projected Quarterly Production		Turbines Installed		Electricity Produced (kwh)
					Per Turbine (kwh)		New	Cum.	
ALTAMONT PASS									
(Alameda and Contra Costa)									
4. FAYETTE (Con't.)									
H. Windranch Partners I	Fayette 95IIS	(H) 95	95 kW @ 37 mph	1	7,000	0	17		30,714 (V)
				2	64,400	0	17		198,887 (V)
				3	61,600	0	17		378,442 (V)
				4	7,000	0	17		84,698 (V)
				Annual	140,000				692,741
				Project Total:					692,741
I. Windranch Partners II	Fayette 95IIS	(H) 95	95 kW @ 37 mph	1	7,000	0	37		55,357 (V)
				2	64,400	0	37		373,192 (V)
				3	61,600	0	37		700,122 (V)
				4	7,000	0	37		197,461 (V)
				Annual	140,000				1,326,132
				Project Total:					1,326,132
5. FLOWIND CORPORATION									
1183 Quarry Lane									
Pleasanton, CA 94566									
A. Flowind I (Dyer Road)	Flowind 17	(V) 260	143 kW @ 44 mph	1	17,357	0	75		1,136,168 (V)
				2	68,169	0	75		3,400,093 (V)
				3	51,808	0	75		3,748,698 (V)
				4	15,447	0	75		1,386,508 (V)
				Annual	152,781				9,671,467

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)		Turbines Installed New Cum.		Electricity Produced (kwh)
ALTAMONT PASS									
(Alameda and Contra Costa)									
5. FLOWIND CORPORATION (Con't.)									
A. Flowind I (Dyer Road), Con't.	Flowind 19	(V) 340	250 kw @ 38 mph	1	30,717	0	1	15,170 (V)	
				2	120,642	0	1	39,419 (V)	
				3	91,688	0	1	94,774 (V)	
				4	27,338	0	1	21,553 (V)	
				Annual	270,385			170,916	
				Project Total:				9,842,383	
B. Flowind II (Elworthy)	Bonus Mark II	(H) 302	119 kw @ 29 mph	1	35,376	0	225	7,558,793 (V)	
				2	117,873	0	225	21,072,204 (V)	
				3	137,893	0	225	28,378,318 (V)	
				4	37,193	0	225	10,905,852 (V)	
				Annual	328,335			67,915,167	
	Bonus Mark III	(H) 415	150 kw @ 29 mph	1	48,108	0	100	4,075,952 (V)	
				2	48,108	0	100	11,936,309 (V)	
				3	1,774,412	0	100	15,895,037 (V)	
				4	49,193	0	100	6,141,969 (V)	
				Annual	1,919,821			38,049,267	
	Danwin H19	(H) 284	110 kw @ 30 mph	1	31,325	0	25	617,384 (V)	
				2	108,504	0	25	1,788,807 (V)	
				3	120,401	0	25	1,565,081 (V)	
				4	32,207	0	25	669,843 (V)	
				Annual	292,437			4,641,115	

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project -----	Turbine Model	Rotor Axis (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production		Turbines Installed		Electricity Produced (kwh)	
					Per Turbine (kwh)		New	Cum.		

ALTAMONT PASS -----										
(Alameda and Contra Costa)										
5. FLOWIND CORPORATION (Con't.)										
B. Flowind II (Elworthy), Con't.	Flowind 17	(V)	260	142 kw @ 44 mph	1	23,957	0	73	1,067,650 (V)	
					2	107,527	0	73	3,864,531 (V)	
					3	113,070	0	73	4,898,171 (V)	
					4	24,342	0	73	1,617,532 (V)	
					-----		-----		-----	
					Annual	268,896			11,447,884	

	Flowind 19	(V)	340	250 kw @ 38 mph	1	39,619	0	19	360,221 (V)	
					2	187,009	0	19	1,391,749 (V)	
					3	190,559	0	19	1,866,593 (V)	
					4	40,134	0	19	284,804 (V)	
					-----		-----		-----	
					Annual	457,321			3,903,367	
=====										
Project Total:									125,956,800	
=====										
6. HOWDEN WIND PARKS, INC. 3685 Mt. Diablo Blvd., Suite 251 Lafayette, CA 94549										
A. Howden Wind Park I	Howden 330/33	(H)	756	330 kw @ 34 mph	1	86,995	0	82	1,834,000 (NV)	
					2	236,855	0	82	5,989,344 (NV)	
					3	226,695	0	82	18,525,768 (NV)	
					4	84,455	0	82	6,141,192 (NV)	
					-----		-----		-----	
					Annual	635,000			32,490,304	

	Howden 60/15	(H)	177	60 kw @ 34 mph	1	14,796	0	10	0 (NV)	
					2	40,284	0	10	0 (NV)	
					3	38,556	0	10	0 (NV)	
					4	14,364	0	10	0 (NV)	
					-----		-----		-----	
					Annual	108,000			0	

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Axis	Rotor (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)	Turbines Installed New Cum.		Electricity Produced (kwh)	
ALTAMONT PASS										
(Alameda and Contra Costa)										
6. HOWDEN WIND PARKS, INC. (Con't.)										
A. Howden Wind Park I, Con't.	Howden 750/45	(H)	1590	750 kw @	34 mph	1	161,660	0	1	0 (NV)
						2	440,140	0	1	4,620 (NV)
						3	421,260	0	1	13,125 (NV)
						4	156,940	0	1	0 (NV)
						Annual	1,180,000			17,745
Project Total:										32,508,049
7. SEAWEST ENERGY GROUP										
1455 Frazee Road										
Suite 300										
San Diego, CA 92108										
A. Altech Energy, Ltd.	Enertech 44/40	(H)	141	40 kw @	30 mph	1	9,700	0	144	827,623 (V)
Other Participant:						2	30,900	0	144	3,052,045 (V)
Altech Energy, Ltd.						3	30,300	0	144	3,962,597 (V)
						4	9,100	0	144	1,247,521 (V)
						Annual	80,000			9,089,786
Project Total:										9,089,786
B. Astroseal, Battlement	Micon 65/13	(H)	200	65 kw @	30 mph	1	13,700	0	8	72,101 (V)
Other Participant:						2	43,600	0	8	238,100 (V)
Western Windfarms						3	42,900	0	8	260,366 (V)
						4	12,800	0	8	89,797 (V)
						Annual	113,000			660,364
Project Total:										660,364

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis	Rotor (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production		Turbines Installed		Electricity Produced (kwh)
						Per Turbine (kwh)		New	Cum.	
ALTAMONT PASS										
(Alameda and Contra Costa)										
7. SEAWEST ENERGY GROUP (Con't.)										
C. C.W.E.S. Ltd.	ESI 54	(H)	211	50 kw @	30 mph	1	9,800	0	30	0 (V)
Other Participant:						2	31,300	0	30	0 (V)
California Wind Energy Systems, Ltd.						3	30,370	0	30	0 (V)
						4	9,200	0	30	0 (V)
						Annual	80,670			0
						Project Total:				0
D. Seawest Energy Group, Inc.	Micon 60/13	(H)	200	60 kw @	33 mph	1	15,100	0	1	12,472 (V)
						2	47,800	0	1	149,311 (V)
						3	47,000	0	1	51,037 (V)
						4	14,100	0	1	8,653 (V)
						Annual	124,000			221,473
						Project Total:				221,473
E. TaxVest Windfarms, Inc. II	Micon 60/13	(H)	200	60 kw @	33 mph	1	13,700	0	11	108,432 (V)
Other Participant:						2	43,600	0	11	342,689 (V)
TaxVest Windfarms, Inc. II						3	42,900	0	11	424,303 (V)
						4	12,800	0	11	125,048 (V)
						Annual	113,000			1,000,472
						Project Total:				1,000,472
F. TaxVest Windfarm 174	Micon 60/13	(H)	200	60 kw @	33 mph	1	13,700	0	174	1,988,257 (V)
Other Participant:						2	43,600	0	174	6,085,560 (V)
TaxVest Windfarms 174						3	42,900	0	174	7,597,267 (V)
						4	12,800	0	174	2,193,508 (V)
						Annual	113,000			17,864,592
						Project Total:				17,864,592

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Axis	Rotor (M2)	Size (kW)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)	Turbines Installed		Electricity Produced (kwh)
							New	Cum.	
ALTAMONT PASS									
(Alameda and Contra Costa)									
7. SEAWEST ENERGY GROUP (Con't.)									
Other Participant: G. Viking-83	Micon 60/13	(H)	200	60 kW @	33 mph	1	14,300	0 26	268,843 (V)
Viking-Energy 83, Ltd.						2	45,500	0 26	888,602 (V)
						3	44,800	0 26	1,111,601 (V)
						4	13,400	0 26	345,881 (V)
						Annual	118,000		2,614,927
Project Total:									2,614,927
=====									
8. TERA CORPORATION									
2150 Shattuck Ave.									
Berkeley, CA 94704									
A. Delta Energy Project	ESI 54	(H)	211	50 kW @	30 mph	1	42,400	0 58	0 (NV)
						2	63,600	0 58	0 (NV)
						3	63,600	0 58	21,391 (NV)
						4	42,400	0 58	32,151 (NV)
						Annual	212,000		53,542
	ESI 54S	(H)	211	65 kW @	39 mph	1	46,400	0 88	198,081 (NV)
						2	69,600	0 87	955,354 (NV)
						3	69,600	0 88	1,155,527 (NV)
						4	46,400	0 88	388,923 (NV)
						Annual	232,000		2,697,885
Project Total:									2,751,427
=====									

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project -----	Turbine Model	Axis	Rotor (M2)	Size (kw)	Quarter; Annual	Projected	Turbines		Electricity	
						Quarterly Production Per Turbine (kwh)	Installed New	Cum.	Produced (kwh)	

ALTAMONT PASS										

(Alameda and Contra Costa)										
9. U.S. WINDPOWER										
500 Sansome Street, Suite 600										
San Francisco, CA 94111										
A. Dyer Road	USW 56-100	(H)	230	100 kw @	29 mph	1	21,000	59	302	5,000,800 (V)
						2	81,900	0	302	22,285,200 (V)
						3	86,100	155	457	36,825,600 (V)
						4	21,000	74	531	16,335,200 (V)
							-----			-----
						Annual	210,000			80,446,800
							=====			=====
						Project Total:				80,446,800
							=====			=====
B. Frick	USW 56-100	(H)	230	100 kw @	29 mph	1	21,000	0	43	1,231,200 (V)
						2	81,900	0	43	3,894,240 (V)
						3	86,100	0	43	4,396,800 (V)
						4	21,000	0	43	1,788,988 (V)
							-----			-----
						Annual	210,000			11,311,228
							=====			=====
						Project Total:				11,311,228
							=====			=====
C. Midway Road	USW 56-100	(H)	230	100 kw @	29 mph	1	21,000	96	1,228	21,362,536 (V)
						2	81,900	12	1,240	80,570,922 (V)
						3	86,100	0	1,240	93,211,222 (V)
						4	21,000	101	1,341	37,434,493 (V)
							-----			-----
						Annual	210,000			232,579,173
							-----			-----
	WEG MS-2	(H)	491	250 kw @	33 mph	1	62,454	0	20	1,252,391 (V)
						2	256,065	0	20	4,034,209 (V)
						3	237,329	0	20	4,030,310 (V)
						4	68,700	0	20	1,750,583 (V)
							-----			-----
						Annual	624,548			11,067,493
							-----			-----

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis	Rotor (M2)	Size (kw)	Quarter; Annual	Projected	Turbines		Electricity
						Quarterly Production Per Turbine (kwh)	Installed New	Cum.	Produced (kwh)

ALTAMONT PASS									

(Alameda and Contra Costa)									
U.S. WINDPOWER (Con't.)									
C. Midway Road, Con't.	WEG MS-E	(H)	855	300 kw @	26 mph	1	0	0	0 (V)
						2	0	0	0 (V)
						3	336,000	1	16,667 (V)
						4	84,000	0	63,626 (V)
						Annual	420,000		80,293
=====									
Project Total:									243,726,959
=====									
D. Ralph	USW 56-100	(H)	230	100 kw @	29 mph	1	21,000	2	7,708,800 (NV)
						2	81,900	0	458 30,508,800 (NV)
						3	86,100	0	458 43,056,000 (NV)
						4	21,000	0	583 12,792,000 (NV)
						Annual	210,000		94,065,600
=====									
Project Total:									94,065,600
=====									
E. Vasco Road	USW 56-100	(H)	230	100 kw @	29 mph	1	21,000	0	774 12,794,400 (V)
						2	81,900	0	774 41,601,600 (V)
						3	86,100	0	774 60,159,600 (V)
						4	21,000	0	774 20,318,400 (V)
						Annual	210,000		134,874,000
=====									
Project Total:									134,874,000
=====									

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project -----	Turbine Model	Rotor Axis (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)	Turbines Installed		Electricity Produced (kwh)
						New	Cum.	
ALTAMONT PASS ----- (Alameda and Contra Costa)								
10. WINDMASTER P.O. Box 669 Byron, CA 94514								
A. Windmaster	HMZ 200kw	(H) 373	200 kw @ 33 mph	1	26,080	0	139	3,101,305 (V)
				2	FAILED	TO	FILE	15,591,293 (UD)*
				3	117,791	0	139	14,805,838 (V)
				4	0	0	139	6,437,793 (V)
				Annual	143,871			39,936,229
	HMZ 250kw	(H) 408	250 kw @ 33 mph	1	40,000	0	20	658,258 (V)
				2	FAILED	TO	FILE	- (UD)*
				3	185,100	0	20	2,899,165 (V)
				4	0	0	20	0 (V)
				Annual	225,100			3,557,423
	HMZ 300kw	(H) 483	300 kw @ 33 mph	1	48,000	5	15	594,437 (V)
				2	FAILED	TO	FILE	- (UD)*
				3	220,285	0	15	2,520,996 (V)
				4	0	0	15	0 (V)
				Annual	268,285			3,115,433
	Project Total:							46,609,085

* Output for this "Failed To File" project is included only under the first listed turbine model of the first listed project.

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project -----	Turbine Model -----	Rotor Axis (M2) -----	Size (kw) -----	Quarter; Annual -----	Projected Quarterly Production Per Turbine (kwh) -----	Turbines Installed		Electricity Produced (kwh) -----
						New	Cum.	
ALTAMONT PASS ----- (Alameda and Contra Costa)								
11. ZOND SYSTEMS, INC. 112 South Curry Street Tehachapi, CA 93561								
A. Santa Clara	Vestas 17	(H) 227	100 kw @ 45 mph	1	27,963	0	200	3,931,603 (NV)
				2	107,191	0	200	12,245,013 (NV)
				3	90,880	0	200	14,728,360 (NV)
				4	6,991	0	200	5,711,992 (NV)
				-----	-----			-----
				Annual	233,025			36,616,968
				=====	=====			=====
				Project Total:				36,616,968
				=====	=====			=====

1987 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project -----	Turbine Model -----	Rotor Axis (M2) -----	Size (kW) -----	Quarter; Annual -----	Projected Quarterly Production -----		Turbines Installed -----		Electricity Produced (kwh) -----
					Per Turbine (kwh)		New	Cum.	
BOULEVARD ----- (San Diego)									
12. BUCKEYE INTERNATIONAL 1455 Frazee Rd. Suite 300 San Diego, CA 92108									
A. California Wind Energy, Ltd.	Micon 22	(H) 78	22 kw @ 37 mph	1	12,100	0	30		144,661 (V)
Other Participant:				2	11,000	0	30		100,835 (V)
Seawest Energy				3	5,800	0	30		42,332 (V)
				4	8,300	0	30		87,456 (V)
				Annual	37,200				375,284
=====									375,284
Project Total:									375,284
=====									
13. RICHARD T. IMMEL WIND FARM 3911 Via del Campo San Clemente, CA 92672									
A. Immel Wind Farm	Enertech 44/25	(H) 137	25 kw @ 30 mph	1	0	0	6		38,085 (V)
				2	0	0	6		37,050 (V)
				3	0	0	6		17,320 (V)
				4	0	0	6		32,350 (V)
				Annual	0				124,805
=====									124,805
Project Total:									124,805
=====									

1987 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project -----	Turbine Model	Rotor Axis (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production Per Turbine	Turbines Installed		Electricity Produced
					(kwh)	New	Cum.	(kwh)
CARQUINEZ STRAIT ----- (Solano, Contra Costa)								
14. WIND GENERATOR PARKS, INC. 7 Wolfback Ridge Road Sausalito, CA 94965								
A. Wind Generator Parks, Inc.	Carter 250	(H) 332	250 kw @ 42 mph	1	75,000	0	1	0 (V)
				2	175,000	0	1	82,200 (V)
				3	175,000	0	1	214,200 (V)
				4	75,000	0	1	23,400 (V)
					-----			-----
				Annual	500,000			319,800
					=====			=====
				Project Total:				319,800
					=====			=====

1987 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project -----	Turbine Model	Rotor Axis (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production	Turbines Installed		Electricity Produced (kwh)
					Per Turbine (kwh)	New	Cum.	
PACHECO PASS ----- (Merced)								
15. ENERGY 21 18 Eastwood Court Oakland, CA 94611								
A. Energy 21	Carter	(H) 77	25 kw @ 30 mph	1	0	0	20	47,400 (V)
				2	0	0	20	120,000 (V)
				3	0	0	20	61,800 (V)
				4	0	0	20	0 (V)
				Annual	0			229,200
=====								229,200
Project Total:								=====
=====								=====

1987 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis (M2)	Size (kW)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)	Turbines Installed New Cum.	Electricity Produced (kwh)
SALINAS VALLEY							
(Monterey)							
16. CASAS DEL SOL							
P.O. Box 89							
Pacific Grove, CA 93950							
A. Herbert Ranch #1	Enertech 44/40	(H) 141	40 kW @ 30 mph	1	10,780	0 4	8,000 (V)
				2	26,250	0 4	25,000 (V)
				3	23,170	0 4	11,500 (V)
				4	9,800	0 4	0 (UD)
				Annual	70,000		44,500
Project Total:							44,500

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)	Turbines Installed		Electricity Produced (kwh)
						New	Cum.	
SAN GORGONIO PASS								
(Riverside)								
17. AMERICAN POWER SYSTEMS, INC.								
26 Linda Isle								
Newport Beach, CA 92660								
A. Jacoby - Kerr Wind Park	Jacobs 26-17.5 @ (H)	49	18 kw @ 27 mph	1	8,037	0	16	63,200 (V)
Other Participant:				2	12,100	0	16	193,632 (V)
CCC Alternative				3	12,100	0	16	181,311 (V)
Energy Ventures				4	8,037	0	16	110,490 (V)
				Annual	40,274			548,633
	Jacobs 26-17.5 @ (H)	49	18 kw @ 27 mph	1	7,182	0	134	339,800 (V)
				2	11,100	0	134	1,480,200 (V)
				3	11,100	0	134	1,326,940 (V)
				4	7,182	0	134	825,440 (V)
				Annual	36,564			3,972,380
	Jacobs 29-20 (H)	61	20 kw @ 27 mph	1	9,662	0	54	262,600 (V)
				2	14,300	0	54	762,762 (V)
				3	14,300	0	54	691,419 (V)
				4	9,662	0	54	429,660 (V)
				Annual	47,924			2,146,441
Project Total:								6,667,454

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis (M2)	Size (kW)	Quarter; Annual	Projected Quarterly Production	Turbines Installed		Electricity Produced
					Per Turbine (kwh)	New	Cum.	(kwh)
SAN GORGONIO PASS ----- (Riverside)								
18. ENERGY DEVELOPMENT AND CONSTRUCTION CO. 745 5th Ave. Suite 405 New York, NY 10151								
A. Karen Avenue Wind Farm	FAILED TO FILE			1				174,000 (UD)
	FAILED TO FILE			2				228,000 (UD)
	FAILED TO FILE			3				48,000 (UD)
	FAILED TO FILE			4				12,000 (UD)

				Annual				462,000
								=====
				Project Total:				462,000
								=====
19. ENERGY UNLIMITED, INC. 1 Aldwyn Center Villanova, PA 19085								
A. Mountain Pass '85 Ltd.	Bonus 65/13 kW (H) 181	65 kW @ 40 mph		1	20,500	0	66	1,056,000 (V)
				2	72,000	0	66	2,968,000 (V)
				3	43,000	0	66	1,616,000 (V)
				4	24,500	0	66	1,472,000 (V)

				Annual	160,000			7,112,000
								=====
				Project Total:				7,112,000
								=====
20. O.E.S.C. P.O. Box 913 North Palm Springs, CA 92258								
A. Altech Energy Ltd., II	Enertech 44/40 (H) 141	40 kW @ 30 mph		1	24,300	0	85	847,971 (NV)
Other Participant:				2	56,100	0	85	3,217,740 (NV)
Altech Energy Ltd., II				3	38,200	0	85	2,520,000 (NV)
				4	15,500	0	85	1,188,000 (NV)

				Annual	134,100			7,773,711
								=====
				Project Total:				7,773,711
								=====

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis	Rotor (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production		Turbines Installed		Electricity Produced (kwh)
						Per Turbine (kwh)		New	Cum.	

SAN GORGONIO PASS										

(Riverside)										
21. RENEWABLE ENERGY VENTURES										
P.O. Box 742										
North Palm Spring, CA 92258										
A. REV Wind Power Partners	ESI 54-S	(H)	216	80 kw @ 40 mph	1	38,200	0	168	1,683,360 (V)	
					2	81,100	0	168	5,879,604 (V)	
					3	63,500	0	168	5,077,068 (V)	
					4	28,300	0	168	3,035,471 (V)	
						-----			-----	
					Annual	211,100			15,675,503	
						-----			-----	
	Jacobs 26-17.5	(H)	49	18 kw @ 27 mph	1	9,500	0	208	721,440 (V)	
					2	19,800	0	208	2,047,596 (V)	
					3	15,600	0	208	1,734,132 (V)	
					4	7,200	0	208	1,126,129 (V)	
						-----			-----	
					Annual	52,100			5,629,297	
						=====			=====	
					Project Total:				21,304,800	
						=====			=====	
22. SAN GORGONIO FARMS										
21515 Hawthorne Blvd., Suite 1059										
Torrance, CA 90503										
A. San Gorgonio Farms Wind Park	Bonus 100 kw	(H)	285	100 kw @ 28 mph	1	62,400	0	55	2,730,450 (V)	
					2	146,520	0	55	7,420,150 (V)	
					3	141,160	0	55	5,327,540 (V)	
					4	49,920	0	55	3,610,910 (V)	
						-----			-----	
					Annual	400,000			19,089,050	
						-----			-----	
	Bonus 120 kw	(H)	127	120 kw @ 40 mph	1	68,640	0	1	46,547 (V)	
					2	161,172	0	1	149,103 (V)	
					3	155,276	0	1	132,670 (V)	
					4	54,912	0	1	37,184 (V)	
						-----			-----	
					Annual	440,000			365,504	
						-----			-----	

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis	Rotor (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)		Turbines Installed New Cum.		Electricity Produced (kwh)
SAN GORGONIO PASS										
(Riverside)										
22. SAN GORGONIO FARMS (Con't.)										
A. San Gorgonio Farms Wind Park, Con't.	Bonus 65 kw	(H)	181	65 kw @ 33 mph	1	43,680	0	81	2,139,261 (V)	
					2	102,564	0	81	6,004,472 (V)	
					3	98,812	0	81	4,648,220 (V)	
					4	34,944	0	81	2,890,489 (V)	
					Annual	280,000			15,682,442	
	Carter 25 kw	(H)	75	25 kw @ 26 mph	1	12,480	0	15	8,494 (V)	
					2	29,304	0	15	117,767 (V)	
					3	28,232	0	15	143,346 (V)	
					4	9,984	0	15	66,725 (V)	
					Annual	80,000			336,332	
	Floda	(H)	1,018	500 kw @ 31 mph	1	0	0	0	0 (V)	
					2	512,820	3	3	896,640 (V)	
					3	494,060	0	3	781,080 (V)	
					4	174,720	0	3	380,760 (V)	
					Annual	1,181,600			2,058,480	
	Micon 65 kw	(H)	200	65 kw @ 33 mph	1	43,680	0	50	1,190,585 (V)	
					2	102,564	0	50	2,736,907 (V)	
					3	98,812	0	50	2,008,321 (V)	
					4	34,944	0	50	1,524,797 (V)	
					Annual	280,000			7,460,610	
Project Total:										44,992,418

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project -----	Turbine Model	Rotor Axis	Rotor (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)	Turbines Installed		Electricity Produced (kwh)
							New	Cum.	
SAN GORGONIO PASS ----- (Riverside)									
23. SANDBERG WIND CORPORATION 31324 Via Colinas Suite 114 Westlake Village, CA 91362									
A. Ventus Wind Park (SWC III)	FAILED TO FILE				1				2,016,000 (UD)
	FAILED TO FILE				2				8,826,000 (UD)
	FAILED TO FILE				3				9,168,000 (UD)
	FAILED TO FILE				4				11,394,000 (UD)
					Annual				31,404,000
					Project Total:				31,404,000
=====									
24. SEAWEST ENERGY GROUP 1455 Frazee Road Suite 300 San Diego, CA 92108									
A. Altech III/Difwind Partners	Micon 100/US	(H)	293	108 kw @	30 mph	1	53,500	0 364	0 (V)
					2	160,200	0 364		0 (V)
					3	108,900	0 364		2,454,508 (V)
					4	41,400	0 364		3,646,030 (V)
					Annual	364,000			6,100,538
	Micon 110/US	(H)	293	108 kw @	30 mph	1	53,700	0 20	534,900 (V)
					2	132,500	0 20		1,197,530 (V)
					3	85,200	0 20		1,059,600 (V)
					4	44,200	0 20		903,910 (V)
					Annual	315,600			3,695,940

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)	Turbines Installed New Cum.	Electricity Produced (kwh)
SAN GORGONIO PASS							
(Riverside)							
24. SEAWEST ENERGY GROUP (Con't.)							
A. Altech III/Difwind Partners, Con't.	Micon 60	(H) 200	60 kw @ 30 mph	1	32,200	0 92	1,325,070 (V)
				2	79,900	0 92	3,866,470 (V)
				3	52,700	0 92	2,622,564 (V)
				4	22,200	0 92	1,384,060 (V)
				Annual	187,000		9,198,164
				Project Total:			18,994,642
B. Difwind V	Micon 110	(H) 293	108 kw @ 30 mph	1	50,800	0 73	1,752,000 (V)
				2	125,600	0 73	3,750,000 (V)
				3	80,700	0 73	3,138,000 (V)
				4	41,900	0 73	2,616,000 (V)
				Annual	299,000		11,256,000
				Project Total:			11,256,000
C. Phoenix Energy Associates/ Other Participant: Phoenix Energy, Ltd.	Enertech 44/40	(H) 141	40 kw @ 30 mph	1	27,283	0 90	1,354,230 (V)
				2	59,388	0 90	4,038,760 (V)
				3	42,998	0 90	3,432,270 (V)
				4	17,331	0 90	1,860,000 (V)
				Annual	147,000		10,685,260
	Micon 110/US	(H) 293	110 kw @ 33 mph	1	57,800	0 16	559,770 (V)
				2	142,800	0 16	1,247,240 (V)
				3	91,800	0 16	962,910 (V)
				4	47,600	0 16	862,610 (V)
				Annual	340,000		3,632,530

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis	Rotor (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production		Turbines Installed		Electricity Produced (kwh)
						Per Turbine (kwh)		New	Cum.	
SAN GORGONIO PASS										
(Riverside)										
24. SEAWEST ENERGY GROUP (Con't.)										
C. Phoenix Energy Associates/ Difwind Partners, Con't.	Micon 60/13	(H)	200	60 kw @	33 mph	1	41,574	0	130	0 (V)
						2	90,496	0	130	0 (V)
						3	65,520	0	130	161,820 (V)
						4	26,410	0	130	1,237,390 (V)
						Annual	224,000			1,399,210
Project Total:										15,717,000
25. SOUTHERN CALIFORNIA SUNBELT										
701 S. Parker St., Suite 7300										
Orange, CA 92668										
A. Palm Springs Wind Park	Starwind	(H)	0	125 kw @	0 mph	1	0	0	5	0 (V)
						2	0	0	5	61,092 (V)
						3	0	0	5	9,114 (V)
						4	0	0	5	39,821 (V)
						Annual	0			110,027
	Wenco	(H)	0	200 kw @	0 mph	1	0	0	14	8,730 (V)
						2	0	0	14	0 (V)
						3	0	0	14	0 (V)
						4	0	0	14	0 (V)
						Annual	0			8,730
	Windmatic 15S	(H)	184	65 kw @	32 mph	1	25,510	0	64	946,694 (V)
						2	52,688	0	64	3,289,206 (V)
						3	43,139	0	64	2,011,558 (V)
						4	18,718	0	64	1,292,506 (V)
						Annual	140,055			7,539,964
Project Total:										7,658,721

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project -----	Turbine Model	Rotor Axis (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production	Turbines Installed		Electricity Produced (kwh)
					Per Turbine (kwh)	New	Cum.	
SAN GORGONIO PASS ----- (Riverside)								
26. TRIAD AMERICAN ENERGY 2212 Dupont Dr. Suite A Irvine, CA 92715								
A. Triad IV - VII	ESI 80	(H) 476	250 kw @ 40 mph	1	0	0	36	0 (V)
				2	FAILED	TO	FILE	2,520,000 (UD)*
				3	FAILED	TO	FILE	3,324,000 (UD)*
				4	FAILED	TO	FILE	2,172,000 (UD)*

				Annual	0			8,016,000
	Vanguard 20/95	(H) 226	95 kw @ 40 mph	1	0	0	60	780,000 (V)
				2	FAILED	TO	FILE	- *
				3	FAILED	TO	FILE	- *
				4	FAILED	TO	FILE	- *

				Annual	0			780,000
				Project Total:				8,796,000
27. WESTERN WINDFARMS 2352 Research Drive Livermore, CA 94559								
A. Dillon Devers	Micon 108	(H) 293	108 kw @ 33 mph	1	47,940	0	4	41,865 (NV)
				2	124,080	0	4	206,931 (NV)
				3	64,860	0	4	183,913 (NV)
				4	45,120	0	4	163,773 (NV)

				Annual	282,000			596,482

* Output for this "Failed To File" project is included only under the first listed turbine model of the first listed project.

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis	Rotor (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production	Turbines Installed		Electricity Produced
						Per Turbine (kwh)	New	Cum.	(kwh)
SAN GORGONIO PASS									
(Riverside)									
27. WESTERN WINDFARMS (Con't.)									
A. Dillon Devers, Con't.	Micon 65	(H)	200	65 kw @ 30 mph	1	30,600	0	15	329,279 (NV)
					2	82,800	0	15	669,743 (NV)
					3	39,600	0	15	425,305 (NV)
					4	27,000	0	15	437,810 (NV)
					Annual	180,000			1,862,137
	Wincon 108	(H)	293	108 kw @ 33 mph	1	47,940	0	18	186,316 (NV)
					2	124,080	0	18	1,134,912 (NV)
					3	64,860	0	18	824,039 (NV)
					4	45,120	0	18	688,838 (NV)
					Annual	282,000			2,834,105
					Project Total:				5,292,724
28. WINDUSTRIES									
P.O. Box 913									
North Palm Spring, CA 92258									
A. Windustries I	Enertech 44/40	(H)	141	40 kw @ 30 mph	1	23,500	0	96	1,488,000 (V)
					2	58,700	0	96	3,865,300 (V)
					3	45,500	0	96	2,880,400 (V)
					4	20,300	0	96	1,533,005 (V)
					Annual	148,000			9,766,705
	Enertech 44/60	(H)	180	60 kw @ 35 mph	1	28,900	0	48	0 (V)
					2	78,800	0	48	1,783,700 (V)
					3	58,400	0	48	1,968,000 (V)
					4	24,600	0	48	921,892 (V)
					Annual	190,700			4,673,592
					Project Total:				14,440,297

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis	Size (kw)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)	Turbines Installed New	Cum.	Electricity Produced (kwh)

SAN GORGONIO PASS								

(Riverside)								

29. WINTEC, LTD.								
P.O. Box 457								
North Palm Spring, CA 92258								

A. Wintec Cahuilla Windpark	Nordtank 60/13	(H) 201	60 kw @ 34 mph	1	45,326	24	72	1,100,755 (V)
				2	84,871	0	72	5,532,466 (V)
				3	65,071	0	72	3,338,022 (V)
				4	14,732	0	72	2,012,716 (V)
				Annual	210,000			11,983,959
=====								
Project Total:								11,983,959
=====								
B. Wintec I Annex	Micon 108	(H) 293	108 kw @ 33 mph	1	50,893	0	7	76,259 (NV)
				2	112,031	0	7	463,660 (NV)
				3	91,002	0	7	314,606 (NV)
				4	7,450	0	7	244,847 (NV)
				Annual	261,376			1,099,372

	Micon 60/13	(H) 200	65 kw @ 33 mph	1	38,170	0	31	633,734 (NV)
				2	84,023	0	31	1,693,184 (NV)
				3	68,252	0	31	1,061,539 (NV)
				4	19,555	0	31	830,951 (NV)
				Annual	210,000			4,219,408

	Nordtank 601	(H) 201	60 kw @ 34 mph	1	0	0	0	0 (NV)
				2	0	0	0	0 (NV)
				3	0	0	0	0 (NV)
				4	19,555	13	13	207,134 (NV)
				Annual	19,555			207,134
=====								
Project Total:								5,525,914
=====								

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project -----	Turbine Model	Rotor Axis	Rotor (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production	Turbines Installed		Electricity Produced
						Per Turbine (kwh)	New	Cum.	(kwh)
SAN GORGONIO PASS ----- (Riverside)									
29. WINTEC, LTD. (Conf.)									
C. Wintec I Windpark	Carter 25 kw	(H)	75	25 kw @ 26 mph	1	17,267	0	177	282,740 (V)
					2	32,332	0	185	1,430,021 (V)
					3	24,789	0	185	796,477 (V)
					4	5,612	0	185	821,515 (V)
					-----	-----			-----
					Annual	80,000			3,330,753
					-----	-----			-----
	Micon 65/13 kw	(H)	200	65 kw @ 33 mph	1	45,326	0	23	504,032 (V)
					2	84,871	0	23	1,645,549 (V)
					3	65,071	0	23	850,522 (V)
					4	14,732	0	23	636,525 (V)
					-----	-----			-----
					Annual	210,000			3,636,628
					=====	=====			=====
					Project Total:				6,967,381
					=====	=====			=====
D. Wintec II Whitewater Windpark	Jacobs 20	(H)	50	20 kw @ 27 mph	1	8,634	0	41	260,220 (NV)
					2	16,166	0	41	450,387 (NV)
					3	12,394	0	41	256,447 (NV)
					4	2,806	0	41	144,637 (NV)
					-----	-----			-----
					Annual	40,000			1,111,691
					-----	-----			-----
	Nordtank 60	(H)	201	65 kw @ 34 mph	1	45,326	0	63	1,426,486 (NV)
					2	84,871	0	63	4,152,134 (NV)
					3	65,071	0	63	2,415,953 (NV)
					4	14,732	0	63	2,052,563 (NV)
					-----	-----			-----
					Annual	210,000			10,047,136
					=====	=====			=====
					Project Total:				11,158,827
					=====	=====			=====

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis	M2	Size (kw)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)	Turbines Installed New	Cum.	Electricity Produced (kwh)
SAN GORGONIO PASS									
(Riverside)									
29. WINTEC, LTD. (Con't.)									
E. Wintec III Riverview Windpark	Jacobs 20	(H)	50	20 kw @ 27 mph	1	8,634	0	177	931,200 (NV)
					2	16,166	0	177	2,503,200 (NV)
					3	12,394	0	177	1,459,200 (NV)
					4	2,806	0	177	1,046,400 (NV)
					Annual	40,000			5,940,000
Project Total:									5,940,000
F. Wintec Palm Windpark	Micon 65	(H)	200	65 kw @ 33 mph	1	45,326	0	30	616,452 (V)
					2	84,871	0	30	2,009,605 (V)
					3	65,071	0	30	1,233,118 (V)
					4	14,732	0	30	837,944 (V)
					Annual	210,000			4,697,119
	Micon 60	(H)	201	65 kw @ 34 mph	1	45,326	0	4	41,621 (V)
					2	84,871	0	4	210,053 (V)
					3	65,071	0	4	180,860 (V)
					4	14,732	0	4	89,488 (V)
					Annual	210,000			522,022
Project Total:									5,219,141
30. ZOND SYSTEMS									
112 South Curry									
Tehachapi, CA 93561									
A. Painted Hills	Vestas 15	(H)	184	65 kw @ 35 mph	1	45,487	0	61	1,143,795 (NV)
					2	82,473	0	61	3,127,629 (NV)
					3	51,226	0	61	2,002,469 (NV)
					4	33,372	0	61	1,478,364 (NV)
					Annual	212,558			7,752,257

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project -----	Turbine Model	Rotor Axis	Rotor (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)		Turbines Installed New Cum.		Electricity Produced (kwh)
SAN GORGONIO PASS ----- (Riverside)										
30. ZOND SYSTEMS (Con't.)										
A. Painted Hills, Con't.	Vestas 17	(H)	227	100 kw @	45 mph	1	53,547	0	170	3,815,964 (NV)
						2	97,084	0	170	12,081,543 (NV)
						3	60,302	0	170	7,602,927 (NV)
						4	39,284	0	170	5,554,252 (NV)
						-----	-----	-----	-----	-----
						Annual	250,217			29,054,686
						=====	=====	=====	=====	=====
						Project Total:				36,806,943
						=====	=====	=====	=====	=====
B. Zond-PanAero Windsystem Partners	Vestas 15	(H)	184	65 kw @	35 mph	1	24,201	0	160	2,888,861 (NV)
						2	121,005	0	160	7,953,159 (NV)
						3	79,225	0	160	5,329,043 (NV)
						4	20,469	0	160	4,284,119 (NV)
						-----	-----	-----	-----	-----
						Annual	244,900			20,455,182
						-----	-----	-----	-----	-----
Other Participant: PanAero Corporation	Vestas 15	(H)	184	65 kw @	35 mph	1	24,626	0	300	5,416,615 (NV)
						2	123,130	0	300	12,613,195 (NV)
						3	80,616	0	300	7,932,349 (NV)
						4	20,828	0	300	6,704,142 (NV)
						-----	-----	-----	-----	-----
						Annual	249,200			32,666,301
						=====	=====	=====	=====	=====
						Project Total:				53,121,483
						=====	=====	=====	=====	=====

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)	Turbines Installed		Electricity Produced (kwh)
						New	Cum.	
TEHACHAPI PASS								
(Kern)								
31. ARBUTUS								
2691 Richer Ave., #114								
Irvine, CA 92714								
A. Pajuela Peak Wind Park	Bonus 65	(H) 181	65 kw @ 45 mph	1	40,500	0	231	5,725,246 (V)
				2	60,750	0	231	8,623,398 (V)
				3	45,600	0	231	5,178,735 (V)
				4	55,650	0	231	5,960,000 (V)
				Annual	202,500			25,487,379
	Windane 12	(H) 144	40 kw @ 30 mph	1	24,528	0	14	135,190 (V)
				2	36,792	0	14	157,840 (V)
				3	27,594	0	14	69,966 (V)
				4	33,726	0	14	139,000 (V)
				Annual	122,640			501,996
	Windtech 75	(H) 250	75 kw @ 35 mph	1	44,700	0	88	79,564 (V)
				2	67,050	0	88	170,762 (V)
				3	50,288	0	88	31,299 (V)
				4	61,462	0	90	68,500 (V)
				Annual	223,500			350,125
=====								
Project Total:								26,339,500
=====								

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project -----	Turbine Model	Rotor Axis (M2)	Size (kw)	Quarter; Annual	Projected	Turbines		Electricity Produced (kwh)
					Quarterly Production Per Turbine (kwh)	Installed	Produced	

TEHACHAPI PASS ----- (Kern)								
32. CANNON FINANCIAL GROUP 6920 Miramar Rd., Suite 304 San Diego, CA 92121								
A. Cameron Ridge Windpark	Bouma 200	(H) 314	135 kw @ 40 mph	1	0	0	35	58,180 (V)
				2	0	0	36	295,412 (V)
				3	0	0	35	128,908 (V)
				4	0	0	36	85,440 (V)
				Annual	450,000			567,940

	Century 6000	(H) 117	75 kw @ 30 mph	1	0	0	5	0 (V)
				2	0	0	5	0 (V)
				3	0	0	5	0 (V)
				4	0	0	5	0 (V)
				Annual	220,000			0

	Century 9000	(H) 117	100 kw @ 37 mph	1	0	0	44	518,401 (V)
				2	0	0	44	113,598 (V)
				3	0	0	44	154,941 (V)
				4	0	0	44	563,963 (V)
				Annual	266,000			1,350,903

	Micon 108	(H) 293	108 kw @ 28 mph	1	0	0	2	90,076 (V)
				2	0	0	2	180,090 (V)
				3	0	0	2	82,464 (V)
				4	0	0	3	229,342 (V)
				Annual	0			581,972

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)	Turbines Installed New	Cum.	Electricity Produced (kwh)
TEHACHAPI PASS								
(Kern)								
32. CANNON FINANCIAL GROUP (Con't.)								
A. Cameron Ridge Windpark, Con't.	Micon 250	(H) 452	250 kw @ 33 mph	1	0	0	0	0 (V)
				2	0	0	0	0 (V)
				3	0	1	1	24,124 (V)
				4	0	0	1	0 (V)
				Annual	220,000			24,124
	Nordtank 150	(H) 330	150 kw @ 42 mph	1	0	0	102	953,887 (V)
				2	0	0	102	4,332,311 (V)
				3	0	0	102	136,897 (V)
				4	0	0	102	6,271,526 (V)
				Annual	520,000			11,694,621
	Nordtank 65/136 (H)	201	65 kw @ 35 mph	1	0	0	50	2,209,188 (V)
				2	0	0	50	3,116,633 (V)
				3	0	0	50	861,663 (V)
				4	0	0	50	1,184,031 (V)
				Annual	190,000			7,371,515
	Nordtank 90/16.6(H)	216	75 kw @ 42 mph	1	0	0	340	4,537,332 (V)
				2	0	0	340	11,006,491 (V)
				3	0	0	340	8,205,880 (V)
				4	0	0	340	10,549,810 (V)
				Annual	276,000			34,299,513
Project Total:								55,890,588

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis	Rotor (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)	Turbines Installed New	Turbines Installed Cum.	Electricity Produced (kwh)
TEHACHAPI PASS									
(Kern)									
32. CANNON FINANCIAL GROUP (Con't.)									
B. Cannon Phase V	Micon 108	(H)	293	108 kw @ 28 mph	1	0	0	138	8,666,330 (V)
					2	0	0	138	7,192,083 (V)
					3	0	0	138	6,581,408 (V)
					4	0	0	138	7,576,694 (V)
					Annual	276,000			30,016,515
Project Total:									30,016,515
33. CORAM ENERGY GROUP									
1725 S. Douglass Road									
Suite B									
Anaheim, CA 92686									
A. Coram Energy Group	Aeroman 12.5 Ser(H)	123		40 kw @ 27 mph	1	0	0	27	405,676 (V)
Other Participant:					2	0	0	27	660,578 (V)
Energy Conversion Technology, Inc.					3	0	0	27	414,078 (V)
					4	0	0	27	433,214 (V)
					Annual	160,000			1,913,546
Project Total:									1,913,546
B. Coram TaxVest Windfarms									
	Aeroman 12.5 Ser(H)	123		40 kw @ 27 mph	1	0	0	100	1,497,489 (V)
Other Participant:					2	0	0	100	2,237,331 (V)
Energy Conversion Technology, Inc.					3	0	0	100	1,232,902 (V)
					4	0	0	100	1,294,666 (V)
					Annual	160,000			6,262,388
Project Total:									6,262,388

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project -----	Turbine Model -----	Rotor Axis (M2) -----	Size (kw) -----	Quarter; Annual -----	Projected Quarterly Production Per Turbine (kwh) -----	Turbines Installed		Electricity Produced (kwh) -----
						New	Cum.	
TEHACHAPI PASS ----- (Kern)								
33. CORAM ENERGY GROUP (Con't.)								
C. Coram TaxVest Windfarms	Aeroman 12.5 Ser(H)	123	40 kw @ 27 mph	1	0	0	47	667,407 (V)
Other Participant:				2	0	0	47	969,468 (V)
Energy Conversion Technology, Inc.				3	0	0	47	490,463 (V)
				4	0	0	47	642,141 (V)
				Annual	160,000			2,769,479
Project Total:								2,769,479
D. Coram TaxVest Windfarms	Aeroman 12.5 ser(H)	123	40 kw @ 27 mph	1	0	0	109	1,413,150 (V)
Other Participant:				2	0	0	109	2,143,486 (V)
Energy Conversion Technology, Inc.				3	0	0	109	1,188,484 (V)
				4	0	0	109	1,424,017 (V)
				Annual	160,000			6,169,137
Project Total:								6,169,137
34. DOLLAR ENERGY SYSTEMS CORP.								
1920 Estela Dr.								
El Cajon, CA 92020								
A. The Mariah Wind Park	Storm Master	(H) 113	40 kw @ 35 mph	1	10,000	0	17	72,999 (NV)
				2	25,000	0	17	125,538 (NV)
				3	27,000	0	17	68,707 (NV)
				4	18,000	0	17	282,600 (NV)
				Annual	80,000			549,844

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Axis	Rotor (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)	Turbines Installed		Electricity Produced (kwh)
							New	Cum.	
TEHACHAPI PASS ----- (Kern)									
34. DOLLAR ENERGY SYSTEMS CORP. (Con't.)									
A. The Mariah Wind Park, Con't.	Storm Master	(H)	113	60 kw @ 45 mph	1	10,000	0	59	296,801 (NV)
					2	25,000	0	59	524,662 (NV)
					3	27,000	0	59	213,893 (NV)
					4	18,000	0	59	0 (NV)
					Annual	80,000			1,035,356
					Project Total:				1,585,200
35. ENERGY UNLIMITED, INC. 1 Aldwyn Center Villanova, PA 19085									
A. Windy Flats '82 and Mountain Flats '83	Carter 25kw	(H)	75	25 kw @ 25 mph	1	16,472	0	25	0 (V)
					2	23,320	0	25	182,043 (V)
					3	12,464	0	25	98,078 (V)
					4	16,472	0	25	170,579 (V)
					Annual	68,728			450,700
					Project Total:				450,700
36. FLOWIND CORPORATION 1183 Quarry Lane Pleasanton, CA 94566									
A. FloWind Cameron Ridge	Flowind 17	(V)	260	142 kw @ 44 mph	1	59,841	0	161	6,610,053 (V)
					2	90,175	0	161	9,532,208 (V)
					3	46,249	0	161	4,447,872 (V)
					4	55,297	0	161	5,814,116 (V)
					Annual	251,562			26,404,249

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis	Size (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)	Turbines Installed New	Cum.	Electricity Produced (kwh)
TEHACHAPI PASS									
(Kern)									
FLOWIND CORPORATION (Con't.)									
A. FloWind Cameron Ridge, Con't.	Flowind 19	(V)	340	250 kw @ 38 mph	1	115,641	0	122	4,439,022 (V)
					2	182,951	0	122	7,691,666 (V)
					3	90,982	0	122	3,851,368 (V)
					4	103,621	0	122	3,533,666 (V)
					Annual	493,195			19,515,722
	Flowind 25	(V)	515	381 kw @ 44 mph	1	0	0	2	137,357 (V)
					2	0	0	2	48,640 (V)
					3	0	0	2	0 (V)
					4	0	0	2	0 (V)
					Annual	0			185,997
	Sumitomo H22	(H)	363	200 kw @ 30 mph	1	0	0	1	81,568 (V)
					2	0	0	1	108,238 (V)
					3	0	0	1	88,760 (V)
					4	0	0	1	54,064 (V)
					Annual	0			332,630
	=====								
Project Total: 46,438,598									
=====									
B. FloWind IV	Flowind 19	(V)	340	250 kw @ 38 mph	1	94,005	0	58	3,175,919 (NV)
					2	165,917	0	58	2,713,338 (NV)
					3	84,944	0	58	1,437,303 (NV)
					4	84,562	0	58	1,126,175 (NV)
					Annual	429,428			8,452,735
	=====								
Project Total: 8,452,735									
=====									

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis	Rotor (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production	Turbines Installed		Electricity Produced
						(kwh)	New	Cum.	(kwh)
TEHACHAPI PASS									
(Kern)									
37. LIBERTY WINDFARMS									
3501 Bernard #11C									
Bakersfield, CA 93306									
A. Liberty Wind Park	Blue Max 50	(H)	97	40 kw @ 34 mph	1	11,300	0	80	212,536 (NV)
					2	32,800	0	80	385,859 (NV)
					3	21,124	0	80	278,232 (NV)
					4	9,276	0	80	267,456 (NV)
					Annual	74,500			1,144,083
					Project Total:				1,144,083
38. NATURAL RESOURCE VENTURES									
23241 Ventura Blvd., Suite 216									
Woodland Hills, CA 91364									
A. Wind Resource I	Nordtank 65/13	(H)	201	65 kw @ 35 mph	1	33,215	0	134	3,272,000 (V)
					2	65,942	0	134	5,048,000 (V)
					3	49,735	0	134	2,676,000 (V)
					4	27,108	0	134	3,224,000 (V)
					Annual	176,000			14,220,000
					Project Total:				14,220,000
39. OAK CREEK ENERGY SYSTEMS									
P.O. Box 469									
Tehachapi, CA 93581									
A. Oak Creek Energy Systems	Blue Max	(H)	108	50 kw @ 0 mph	1	0	0	27	0 (NV)
					2	0	0	27	0 (NV)
					3	FAILED	TO	FILE	3,603,200 (UD)*
					4	FAILED	TO	FILE	3,585,600 (UD)*
					Annual	0			7,188,800

* Output for this "Failed To File" project is included only under the first listed turbine model of the first listed project.

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Axis	Rotor (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)	Turbines Installed		Electricity Produced (kwh)
							New	Cum.	
TEHACHAPI PASS									
(Kern)									
OAK CREEK ENERGY SYSTEMS (Con't.)									
A. Oak Creek Energy Systems, Con't.	Blue Max	(H)	108	50 kw @ 0 mph	1	0	0	50	0 (NV)
					2	0	0	50	0 (NV)
					3	FAILED	TO	FILE	- *
					4	FAILED	TO	FILE	- *
					Annual	0			0
	Bonus	(H)	200	65 kw @ 0 mph	1	27,000	0	51	891,092 (NV)
					2	41,400	0	51	1,354,631 (NV)
					3	FAILED	TO	FILE	- *
					4	FAILED	TO	FILE	- *
					Annual	68,400			2,245,723
	Carter	(H)	75	25 kw @ 0 mph	1	11,400	0	70	15,503 (NV)
					2	17,480	0	70	1,314 (NV)
					3	FAILED	TO	FILE	- *
					4	FAILED	TO	FILE	- *
					Annual	28,880			16,817
	Flowind	(V)	0	120 kw @ 0 mph	1	0	0	1	0 (NV)
					2	0	0	1	0 (NV)
					3	FAILED	TO	FILE	- *
					4	FAILED	TO	FILE	- *
					Annual	0			0

* Output for this "Failed To File" project is included only under the first listed turbine model of the first listed project.

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis	Rotor (M2)	Size (kw)	Quarter; Annual	Projected	Turbines Installed	Electricity Produced (kwh)
						Quarterly Production Per Turbine (kwh)		
TEHACHAPI PASS								
(Kern)								
39. OAK CREEK ENERGY SYSTEMS (Con't.)								
A. Oak Creek Energy Systems, Con't.	Lolland	(H)	184	75 kw @ 0 mph	1	31,050	0 21	27,960 (NV)
					2	47,610	0 21	42,486 (NV)
					3	FAILED	TO FILE	- *
					4	FAILED	TO FILE	- *
					Annual	78,660		70,446
	Lolland	(H)	288	110 kw @ 0 mph	1	45,000	0 50	1,321,412 (NV)
					2	69,000	0 50	1,564,146 (NV)
					3	FAILED	TO FILE	- *
					4	FAILED	TO FILE	- *
					Annual	114,000		2,885,558
	Micon	(H)	293	110 kw @ 0 mph	1	45,000	0 50	751,786 (NV)
					2	69,000	0 50	759,169 (NV)
					3	FAILED	TO FILE	- *
					4	FAILED	TO FILE	- *
					Annual	114,000		1,510,955
	Micon	(H)	200	65 kw @ 0 mph	1	27,000	0 66	897,958 (NV)
					2	41,400	0 66	1,302,515 (NV)
					3	FAILED	TO FILE	- *
					4	FAILED	TO FILE	- *
					Annual	68,400		2,200,473

* Output for this "Failed To File" project is included only under the first listed turbine model of the first listed project.

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Axis	Rotor (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)	Turbines Installed New Cum.		Electricity Produced (kwh)
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
TEHACHAPI PASS									

(Kern)									
OAK CREEK ENERGY SYSTEMS (Con't.)									
A. Oak Creek Energy Systems, Con't.	Nordtank	(H)	201	65 kw @ 0 mph	1	27,000	0	66	1,474,892 (NV)
					2	41,400	0	66	1,897,216 (NV)
					3	FAILED	TO	FILE	- *
					4	FAILED	TO	FILE	- *
					Annual	68,400			3,372,108
	Vestas	(H)	184	65 kw @ 0 mph	1	27,000	0	7	156,193 (NV)
					2	41,400	0	7	264,123 (NV)
					3	FAILED	TO	FILE	- *
					4	FAILED	TO	FILE	- *
					Annual	68,400			420,316
	Wecs-Tec	(H)	0	100 kw @ 0 mph	1	0	0	1	0 (NV)
					2	0	0	1	0 (NV)
					3	FAILED	TO	FILE	- *
					4	FAILED	TO	FILE	- *
					Annual	0			0
	Wecs-Tec	(H)	0	65 kw @ 0 mph	1	0	0	29	0 (NV)
					2	0	0	29	0 (NV)
					3	FAILED	TO	FILE	- *
					4	FAILED	TO	FILE	- *
					Annual	0			0
Project Total:									
									19,911,196

* Output for this "Failed To File" project is included only under the first listed turbine model of the first listed project.

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis	Rotor (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production	Turbines Installed		Electricity Produced
						Per Turbine (kwh)	New	Cum.	(kwh)
TEHACHAPI PASS									
(Kern)									
40. SEAWEST INDUSTRIES, INC.									
1455 Frazee Road									
Suite 300									
San Diego, CA 92108									
A. Difwind VI/Viking I	Danwin 23/160	(H)	423	160 kw @ 34 mph	1	120,000	0	91	4,882,432 (V)
					2	204,000	0	91	11,623,116 (V)
					3	162,000	0	91	8,088,448 (V)
					4	114,000	0	91	7,356,684 (V)
					Annual	600,000			31,950,680
	MWT 250S	(H)	491	250 kw @ 31 mph	1	130,000	0	20	1,794,813 (V)
					2	240,500	0	20	3,371,056 (V)
					3	149,500	0	20	2,341,899 (V)
					4	130,000	0	20	2,246,700 (V)
					Annual	650,000			9,754,468
	Micon 110	(H)	293	108 kw @ 30 mph	1	70,700	0	251	10,832,528 (V)
					2	137,800	0	251	19,737,410 (V)
					3	85,700	0	251	11,436,457 (V)
					4	78,200	0	251	12,396,154 (V)
					Annual	372,400			54,402,549
	Nordtank 150S	(H)	330	150 kw @ 35 mph	1	77,300	0	62	2,918,909 (V)
					2	150,400	0	62	5,588,412 (V)
					3	93,500	0	62	3,981,196 (V)
					4	85,400	0	62	3,272,461 (V)
					Annual	406,600			15,760,978
									111,868,675
	Project Total:								

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis	Rotor (M2)	Size (kw)	Quarter; Annual	Projected	Turbines Installed	Electricity Produced (kwh)
						Quarterly Production Per Turbine (kwh)		
TEHACHAPI PASS								
(Kern)								
41. SOUTHERN CALIFORNIA SUNBELT								
701 S. Parker Street								
Suite 7300								
Orange, CA 92668								
A. Mojave Wind Park	Airmaster	(H)	0	100 kw @ 40 mph	1	0	0 10	0 (V)
					2	0	0 10	0 (V)
					3	0	0 10	0 (V)
					4	0	0 10	0 (V)
					Annual	0		0
	Windmatic 17S	(H)	227	95 kw @ 34 mph	1	25,510	0 95	1,769,296 (V)
					2	52,688	0 95	2,821,548 (V)
					3	43,139	0 95	1,943,532 (V)
					4	18,718	0 95	1,905,125 (V)
					Annual	140,055		8,439,501
	Project Total:							8,439,501
42. TRIAD AMERICAN ENERGY								
2212 Dupont Dr.								
Suite A								
Irvine, CA 92715								
A. Triad III	ESI 54-S	(H)	213	80 kw @ 40 mph	1	0	0 38	34,064 (NV)
Other Operator:					2	FAILED	TO FILE	- (UD)*
Windland, Inc.					3	FAILED	TO FILE	- (UD)*
					4	FAILED	TO FILE	- (UD)*
					Annual	210,000		34,064

* Output for this "Failed To File" project is included only under the first listed turbine model of the first listed project.

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis	Rotor (M2)	Size (kw)	Quarter; Annual	Projected Quarterly	Turbines Installed		Electricity
						Production Per Turbine (kwh)	New	Cum.	Produced (kwh)
TEHACHAPI PASS									
(Kern)									
42. TRIAD AMERICAN ENERGY (Con't.)									
A. Triad III, Con't.	ESI 80-200S	(H)	476	250 kw @ 40 mph	1	0	0	6	12,338 (NV)
					2	FAILED	TO	FILE	- *
					3	FAILED	TO	FILE	- *
					4	FAILED	TO	FILE	- *
					Annual	532,000			12,338
					Project Total:				46,402
43. WIND FARMS MANAGEMENT									
2509 Thousand Oaks Blvd., Suite 197									
Thousand Oaks, CA 91362									
A. Cache Creek Wind Farm	FAILED TO FILE				1				68,000 (UD)
	FAILED TO FILE				2				124,000 (UD)
	FAILED TO FILE				3				2,000 (UD)
	FAILED TO FILE				4				36,000 (UD)
					Annual				230,000
					Project Total:				230,000
44. WINDLAND, INC.									
2141 Palomar Airport Road, Suite 360									
Carlsbad, CA 92009									
A. Windland Wind Park	Bonus 120/20	(H)	296	120 kw @ 40 mph	1	FAILED	TO	FILE	1,447,200 (UD)*
(Boxcar 1)					2	157,000	0	11	999,781 (V)
					3	78,500	0	11	599,201 (V)
					4	78,500	0	11	644,262 (V)
					Annual	314,000			3,690,444

* Output for this "Failed To File" project is included only under the first listed turbine model of the first listed project.

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)	Turbines Installed New Cum.	Electricity Produced (kwh)
TEHACHAPI PASS							
(Kern)							
44. WINDLAND, INC. (Con't.)							
A. Windland Wind Park (Boxcar 1), Con't.	Carter Model 25 (H)	75	25 kw @ 30 mph	1	FAILED	TO FILE	- *
				2	30,700	0 29	226,751 (V)
				3	15,300	0 39	137,693 (V)
				4	15,300	0 39	188,644 (V)
				Annual	61,300		553,088
	Carter Model 250(H)	332	250 kw @ 30 mph	1	FAILED	TO FILE	- *
				2	240,000	0 13	624,619 (V)
				3	120,000	0 13	483,742 (V)
				4	120,000	0 13	541,589 (V)
				Annual	480,000		1,649,950
	Storm Master 12 (H)	113	40 kw @ 42 mph	1	FAILED	TO FILE	- *
				2	36,000	0 10	116,530 (V)
				3	18,000	0 10	66,554 (V)
				4	18,000	0 10	58,967 (V)
				Annual	72,000		242,051
	Vestas V25-200 (H)	491	200 kw @ 30 mph	1	FAILED	TO FILE	- *
				2	125,000	2 2	330,701 (V)
				3	125,000	0 2	143,604 (V)
				4	125,000	0 2	0 (V)
				Annual	375,000		474,305
Project Total:							6,609,838

* Output for this "Failed To File" project is included only under the first listed turbine model of the first listed project.

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis	Rotor (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production	Turbines Installed		Electricity Produced
						Per Turbine (kwh)	New	Cum.	(kwh)
TEHACHAPI PASS									
(Kern)									
44. WINDLAND, INC. (Gon't.)									
B. Windland Wind Park (Boxcar II)	Bonus 65/13	(H)	181	65 kw @ 40 mph	1	FAILED	TO	FILE	- *
					2	74,400	0	4	39,817 (V)
					3	37,200	0	4	30,608 (V)
					4	37,200	0	4	55,336 (V)
					Annual	148,800			125,761
	Enertech 44/60	(H)	180	60 kw @ 35 mph	1	FAILED	TO	FILE	- *
					2	0	0	12	118,183 (V)
					3	0	0	12	119,392 (V)
					4	0	0	12	154,218 (V)
					Annual	0			391,793
									517,554
					Project Total:				
45. WINDRIDGE									
406 E. Tehachapi Blvd.									
Tehachapi, CA 93561									
A. Willowind	FAILED TO FILE				1				746,000 (UD)
	FAILED TO FILE				2				1,238,000 (UD)
	FAILED TO FILE				3				680,000 (UD)
	FAILED TO FILE				4				700,000 (UD)
					Annual				3,364,000
									3,364,000
					Project Total:				

* Output for this "Failed To File" project is included only under the first listed turbine model of the first listed project.

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis (M2)	Size (kw)	Quarter; Annual	Projected	Turbines		Electricity
					Quarterly Production Per Turbine (kwh)	Installed New	Cum.	Produced (kwh)
TEHACHAPI PASS								
(Kern)								
46. ZOND SYSTEMS, CORP.								
112 South Curry Street								
Tehachapi, CA 93561								
A. Feeder 0	Storm Master 12 (H)	113	40 kw @ 40 mph	1	47,600	0	47	54,390 (NV)
				2	40,600	0	47	20,077 (NV)
				3	22,400	0	47	89,915 (NV)
				4	29,400	0	47	251,915 (NV)
				Annual	140,000			416,297
Project Total:								416,297
B. Feeder 1	Polenko 18 (H)	254	100 kw @ 35 mph	1	108,129	0	15	590,736 (NV)
				2	92,228	0	15	840,829 (NV)
				3	50,884	0	15	375,888 (NV)
				4	66,785	0	15	87,921 (NV)
				Annual	318,026			1,895,374
	Vestas 15 (H)	184	65 kw @ 35 mph	1	81,953	0	58	1,087,467 (NV)
				2	69,901	0	58	1,450,815 (NV)
				3	38,566	0	58	596,669 (NV)
				4	50,618	0	58	807,650 (NV)
				Annual	241,038			3,942,601
	Windmatic 14S (H)	184	65 kw @ 35 mph	1	72,541	0	30	555,919 (NV)
				2	61,873	0	30	750,513 (NV)
				3	34,137	0	30	318,439 (NV)
				4	44,805	0	30	490,890 (NV)
				Annual	213,356			2,115,761
Project Total:								7,953,736

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project -----	Turbine Model -----	Rotor Axis (M2) -----	Size (kw) -----	Quarter; Annual -----	Projected Quarterly Production Per Turbine (kwh) -----	Turbines Installed		Electricity Produced (kwh) -----
						New	Cum.	
TEHACHAPI PASS ----- (Kern)								
46. ZOND SYSTEMS, CORP. (Con't.)								
C. Feeder 2	Vestas 15	(H) 184	65 kw @ 35 mph	1	81,953	0	2	42,348 (NV)
				2	69,901	0	2	36,771 (NV)
				3	38,566	0	2	16,970 (NV)
				4	50,618	0	2	20,590 (NV)
				Annual	241,038			116,679
	Vestas 15	(H) 184	65 kw @ 35 mph	1	72,171	0	5	105,869 (NV)
				2	61,558	0	5	137,303 (NV)
				3	33,963	0	5	50,976 (NV)
				4	44,576	0	5	122,024 (NV)
				Annual	212,268			416,172
	Vestas 15	(H) 184	65 kw @ 35 mph	1	81,953	0	13	275,260 (NV)
				2	69,901	0	13	423,406 (NV)
				3	38,556	0	13	204,040 (NV)
				4	50,618	0	13	229,670 (NV)
				Annual	241,028			1,132,376
	Vestas 15	(H) 184	65 kw @ 35 mph	1	81,953	0	75	1,588,039 (NV)
				2	69,901	0	75	2,149,968 (NV)
				3	38,566	0	75	992,567 (NV)
				4	50,618	0	75	1,167,195 (NV)
				Annual	241,038			5,897,769
Project Total:								7,562,996

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Axis	Rotor (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)	Turbines Installed New Cum.	Electricity Produced (kwh)
TEHACHAPI PASS								
(Kern)								
46. ZOND SYSTEMS, CORP. (Con't.)								
D. Feeder 3	Vestas 15	(H)	184	65 kw @ 35 mph	1	72,171	0 97	1,579,979 (NV)
					2	61,558	0 97	2,213,383 (NV)
					3	33,963	0 97	1,562,744 (NV)
					4	44,576	0 97	2,127,135 (NV)
					Annual	212,268		7,483,241
					Project Total:			7,483,241
E. Feeder 5	Vestas 15	(H)	184	65 kw @ 35 mph	1	64,906	0 1	17,937 (NV)
					2	55,361	0 1	10,095 (NV)
					3	30,544	0 1	17,966 (NV)
					4	40,089	0 1	21,904 (NV)
					Annual	190,900		67,902
	Vestas 15	(H)	184	65 kw @ 35 mph	1	72,171	0 86	1,542,609 (NV)
					2	61,558	0 86	1,890,683 (NV)
					3	33,963	0 86	1,037,307 (NV)
					4	44,576	0 86	1,686,727 (NV)
					Annual	212,268		6,157,326
	Vestas 17	(H)	227	90 kw @ 35 mph	1	82,569	0 4	172,194 (NV)
					2	70,427	0 4	216,370 (NV)
					3	38,356	0 4	124,185 (NV)
					4	50,999	0 4	159,331 (NV)
					Annual	242,351		672,080
					Project Total:			6,897,308

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis	Rotor (M2)	Size (kw)	Quarter; Annual	Projected	Turbines		Electricity	
						Quarterly Production Per Turbine (kwh)	Installed New	Cum.	Produced (kwh)	

TEHACHAPI PASS										

(Kern)										

46. ZOND SYSTEMS, CORP. (Con't.)										

F. Feeder 6	Vestas 15	(H)	184	65 kw @ 35 mph	1	64,906	0	45	401,684 (NV)	
					2	55,361	0	45	1,122,389 (NV)	
					3	30,544	0	45	774,540 (NV)	
					4	40,089	0	45	1,126,923 (NV)	

	Annual				190,900			3,425,536		

	Vestas 17	(H)	227	90 kw @ 35 mph	1	0	0	5	0 (NV)	
					2	0	0	6	0 (NV)	
					3	0	0	6	0 (NV)	
4					0	0	6	0 (NV)		

Annual				0			0			

Windmatic 15S	(H)	184	65 kw @ 35 mph	1	53,848	0	9	62,438 (NV)		
				2	45,929	0	9	121,915 (NV)		
				3	25,340	0	9	59,620 (NV)		
				4	33,259	0	9	49,957 (NV)		

Annual				158,376			293,930			
=====										
Project Total:									3,719,466	
=====										
G. Feeder 8	Storm Master	(H)	113	40 kw @ 40 mph	1	32,760	0	25	32,691 (NV)	
					2	54,180	0	25	0 (NV)	
					3	17,640	0	25	1,833 (NV)	
					4	35,420	0	25	128,843 (NV)	

	Annual				140,000			163,367		

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Axis	Rotor (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)	Turbines Installed New Cum.	Electricity Produced (kwh)
TEHACHAPI PASS								
(Kern)								
46. ZOND SYSTEMS, CORP. (Con't.)								
G. Feeder 8, Con't.	Vestas 15	(H)	184	65 kw @ 35 mph	1	81,953	0 8	179,577 (NV)
					2	69,901	0 8	252,388 (NV)
					3	38,566	0 8	122,523 (NV)
					4	50,618	0 8	656,758 (NV)
					Annual	241,038		1,211,246
					Project Total:			1,374,613
H. K Site	Vestas 15	(H)	184	65 kw @ 35 mph	1	40,716	0 41	607,070 (NV)
					2	67,338	0 41	911,939 (NV)
					3	21,924	0 41	435,507 (NV)
					4	44,022	0 41	656,758 (NV)
					Annual	174,000		2,611,274
	Vestas 17	(H)	227	90 kw @ 35 mph	1	40,716	0 37	1,327,802 (NV)
					2	67,338	0 37	2,194,025 (NV)
					3	21,924	0 37	1,147,063 (NV)
					4	44,022	0 37	1,392,345 (NV)
					Annual	174,000		6,061,235
					Project Total:			8,672,509
I. 33 - East	Vestas 17	(H)	227	90 kw @ 35 mph	1	55,809	0 70	1,889,458 (NV)
					2	92,300	0 70	2,795,745 (NV)
					3	30,051	0 70	1,234,288 (NV)
					4	60,340	0 70	2,002,084 (NV)
					Annual	238,500		7,921,575

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project

TEHACHAPI PASS

(Kern)

46. ZOND SYSTEMS, CORP. (Con't.)

I. 33 - East, Con't.

Turbine Model	Rotor Axis	Rotor (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)	Turbines Installed		Electricity Produced (kwh)
						New	Cum.	
Vestas 17	(H)	227	90 kw @ 35 mph	1	55,809	0	90	2,447,038 (NV)
				2	92,300	0	90	3,413,799 (NV)
				3	30,051	0	90	1,731,313 (NV)
				4	60,340	0	90	3,097,882 (NV)
				Annual	238,500			10,690,032
Vestas 17	(H)	227	90 kw @ 35 mph	1	55,809	0	102	3,398,440 (NV)
				2	92,300	0	102	4,774,855 (NV)
				3	30,051	0	102	2,402,169 (NV)
				4	60,340	0	102	3,404,641 (NV)
				Annual	238,500			13,980,105
Vestas 17	(H)	227	90 kw @ 35 mph	1	55,809	0	140	3,621,857 (NV)
				2	92,300	0	140	5,115,382 (NV)
				3	30,051	0	140	2,417,745 (NV)
				4	60,340	0	140	3,907,675 (NV)
				Annual	238,500			15,062,659
Project Total:								47,654,371
Vestas 17	(H)	227	90 kw @ 35 mph	1	52,467	0	27	1,102,301 (NV)
				2	45,425	0	27	1,552,275 (NV)
				3	43,144	0	27	840,458 (NV)
				4	76,312	0	27	1,065,230 (NV)
				Annual	217,348			4,560,264
Project Total:								4,560,264

1988 WIND PERFORMANCE REPORTING SYSTEM

Location/Operator/Project	Turbine Model	Rotor Axis (M2)	Size (kw)	Quarter; Annual	Projected Quarterly Production Per Turbine (kwh)	Turbines Installed New Cum.	Electricity Produced (kwh)
TEHACHAPI PASS							
(Kern)							
46. ZOND SYSTEMS, CORP. (Con't.)							
K. Pool V26	Vestas 17	(H) 227	90 kw @ 35 mph	1	52,467	0 205	10,369,070 (NV)
				2	45,425	0 205	14,290,604 (NV)
				3	43,144	0 205	8,921,277 (NV)
				4	76,312	0 205	9,232,991 (NV)
				Annual	217,348		42,813,942
	Project Total:						42,813,942

APPENDIX A **NON-OPERATING WIND PROJECTS**

The following list of wind projects are currently not being operated by any wind operator. The power purchaser reports submitted to the California Energy Commission show that no electricity was bought from any of these projects during identified reporting quarters. If any party begins to operate one of these projects, and subsequently receives payments for electricity from a wind power purchaser, then they will become responsible for filing regular quarterly WPRS reports.

The name of these projects, their resource area, previous operator, current contact (if different than previous operator) and quarters they did not operate in 1988.

PROJECT NAME	RESOURCE AREA/COUNTY	PREVIOUS OPERATOR	CURRENT CONTACT	QUARTERS NOT OPERATING
1. Airtricity Wind Park	Tehachapi Pass Kern County San Gorgonio Pass Riverside County	Airtricity 100 Commercial Way Tehachapi, CA 93561	Same	1/2/3/4
2. American Diversified Wind Partner	Altamont Pass Alameda County	American Diversified 523 N. 6th St., Suite 400 Los Angeles, CA 90014	Same	2
3. Cannon 1982 Phase I Program	Tehachapi Pass Kern County	Cannon Capital Group 6920 Miramar Rd. San Diego, CA 92121	Same	1/2/3/4
4. Cannon 1983 Phase II Program	Tehachapi Pass Kern County	Cannon Capital Group 6920 Miramar Rd. San Diego, CA 92121	Same	1/2/3/4
5. C.W.E.S.	Altamont Pass Alameda County	SeaWest Energy Group 1455 Frazee Rd., St. 300 San Diego, CA 92108	Same	1/2/3/4
6. Desert Wind Partners	San Gorgonio Pass Riverside County	Desert Wind Partners (Address Unknown)	Mindtech 24 Union Jack, St. 3 Marina del Rey CA 90292	1/2/3/4

PROJECT NAME	RESOURCE AREA/COUNTY	PREVIOUS OPERATOR	CURRENT CONTACT	QUARTERS NOT OPERATING
7. Energy 21	Pacheco Pass Merced County	Energy 21 18 Eastwood Court Oakland, CA 94611	Same	4
8. Herbert Ranch #1	Salinas Valley Monterey County	Casas Del Sol P.O. Box 89 Pacific Grove, CA 93950	Same	4
9. Lopes Road Wind Park	Carquinez Strait Solano, Contra Costa County	Wind Watt, Inc. 1700 Broadway Vallejo, CA 94589	Same	1/2/3/4
10. Pacheco Wind Park	Pacheco Pass Merced County	Aura Energy Systems 22 Battery St., Ste. 300 San Francisco, CA 94111	West Wind Ind. P.O. Box 1705 Davis, CA 95617	1/2/3/4
11. Ridgeline Windfarm	Tehachapi Pass Kern County	Zond Systems, Inc. 112 S. Curry Street Tehachapi, CA 93561	Univ. Properties 132 S. Rodeo Dr. Beverly Hills, CA 90212	1/2/3/4
12. Transworld (Cabazon & Maeva)	San Gorgonio Pass Riverside County	Transworld Wind Corp. 400 S. Farrell Dr., St. B202 Palm Springs, CA 92262	Same	1/2/3/4
13. Triad I, II	San Gorgonio Pass Riverside County	Triad American Energy 11791 Fitch Irvine, CA 92714	Same	1/2/3/4
14. Ventus Wind Park (SWC I)	San Gorgonio Pass Riverside Co.	Sandberg Wind Corp. 31324 Via Colinas, Ste 114 Westlake Village, CA 91362	Same	1/2/3/4
15. Wind Energy Tech. Associates (WETA) I	Altamont Pass Alameda County	Fayette P.O. Box 1149 Tracy, CA 95376	Same	1/2/3/4

PROJECT NAME	RESOURCE AREA/COUNTY	PREVIOUS OPERATOR	CURRENT CONTACT	QUARTERS NOT OPERATING
16. Wind Generator Parks	Carquinez Strait Solano, Contra Costa County	Wind Generator Parks 7 Wolfback Ridge Rd. Sausalito, CA 94965	Same	1
17. Zephyr Park Ltd.	Tehachapi Pass Kern County	Zephyr Park Ltd. 18 Eastwood Court Oakland, CA 94611	Same	1/2/3/4

APPENDIX B
WIND TURBINE MANUFACTURES

This Appendix contains the name, address and phone number of all manufacturers and/or distributors of wind turbines installed in California wind projects as reported for WPRS.

MANUFACTURER/DISTRIBUTOR	COUNTRY OF ORIGIN	TURBINE BRAND NAME(S)	PROJECT(S) WHERE TURBINE IS USED
1. Airmaster c/o Basin Petroleum Service P.O. Box 1161 Powell, WY 82435 "No Longer Active"	U.S.	Airmaster	41A
2. American M.A.N. West Coast Office 303 Hegenberger Rd., Ste. 402 Oakland, CA 94621 Phone: (415) 430-0754	West Germany	Aeroman	33A-D
3. Arizona Micro-Utilities 1890 E. Greenway Tempe, AZ 85282 Phone: (602) 839-7709	Switzerland	Wenco	25A
4. Bonus Wind Turbines, Inc. 444 West Ocean Blvd. Suite 1102 Long Beach, CA 90802 Phone: (213) 436-9042	Denmark	Bonus	3B, 4D, 5B, 19A, 22A, 31A, 49A, 44A-B
5. Bouma Wind Turbines P.O. Box 79483 Houston, TX 77024 Phone: (713) 222-07426	Holland	Bouma	32A
6. Carter Wind Systems, Inc. Route 1, Box 405A Burkburnett, TX 76364 Phone: (817) 569-2238	U.S.	Carter	14A, 15A, 22A, 29A, 35A, 39A, 44A

MANUFACTURER/DISTRIBUTOR	COUNTRY OF ORIGIN	TURBINE BRAND NAME(S)	PROJECT(S) WHERE TURBINE IS USED
7. Century Design, Inc. 3635 Afton Road San Diego, CA 92123 Phone: (619) 292-1212 "No Longer Active"	U.S.	Century (CT)	32A
8. Danish Wind Technology Marsk Stiysvey 4 DK 8800, Viborg DENMARK	Denmark	Windane	31A
9. Danish Windpower P.O. Box 14 DK 4999, Nakskov DENMARK	Denmark	Lolland	39A
10. Danwin A/S Industrivej 12 DK-3000, Helsingor DENMARK	Denmark	Danwin (H)	5B, 40A
11. Earth Energy Systems Inc. P.O. Box 742 N. Palm Springs, CA 92258	U.S.	Jacobs	17A, 21A, 29D-E
12. Enertech Corporation P.O. Box 1085 Norwich, VT 05055 Phone: (802) 649-1145 "No Longer Active"	U.S.	Enertech	7A, 13A, 16A, 20A, 24C, 28A, 44B
13. Energy Sciences, Inc. P.O. Box 1336 Tracy, CA 94568 Phone: (415) 833-0400 "No Longer Active"	U.S.	ESI	7C, 8A, 21A, 26A, 42A

MANUFACTURER/DISTRIBUTOR	COUNTRY OF ORIGIN	TURBINE BRAND NAME(S)	PROJECT(S) WHERE TURBINE IS USED
14. Fayette Manufacturing Corp. P.O. Box 1149 Tracy, CA 95376 Phone: (415) 443-2929	U.S.	Fayette	4A-I
15. FloWind Corporation 21414 68th Avenue South Kent, WA 98032 Phone: (206) 872-8500	U.S.	FloWind (F)	5A-B, 36A-B, 39A
16. Hall Machinery 1401 Airport Drive Bakersfield, CA 93308 "No Longer Active"	U.S.	Blue Max	37A, 39A
17. HMZ Belgium N.V. Rellestraat 3 Industrie Zone 5 3800 Sint-Truiden BELGIUM	Belgium	HMZ	10A
18. Holec Power Systems, Inc. P.O. Box 2227 Livermore, CA 94550 Phone: (415) 449-9960	Denmark	Polenko (WPS)	3A, 46B
19. James Howden and Company 195 Scotland Street Glasgow C5 9PJ SCOTLAND	Scotland	Howden (HWP)	6A
20. Micon Wind Turbines, Inc. 2352 Research Drive Livermore, CA 94556 Phone: (619) 297-8066	Denmark	Micon	4B, 4D, 7B,D-G, 12A 22A, 24A-C, 29B-C,F 32A-B, 39A, 40A

MANUFACTURER/DISTRIBUTOR	COUNTRY OF ORIGIN	TURBINE BRAND NAME(S)	PROJECT(S) WHERE TURBINE IS USED
21. Mitsubishi c/o SeaWest Industries, Inc. 1455 Frazee Road, Ste. 300 San Diego, CA 92108 Phone: (619) 293-3340	Japan	M W T	40A
22. Nordtank Energy Group Nyballevvej8 DK-8444 Balle Phone: 45 6 33 7200 DENMARK	Denmark	Nordtank (NTV)	3B, 29A-B,D, 32A, 38A, 39A,40A
23. Starwind Maintenance 103 N. Hwy 101, Ste. 2001 Encinitas, CA 92024	U.S.	Starwind	25A
24. Sumitomo Machinery Corp. 2143 E. "D" Street Ontario, CA 91764	Japan	Sumitomo	36A
25. U.S. Windpower 500 Sansome St., Ste. 600 San Francisco, CA 94111 Phone: (415) 398-3825	U.S.	U.S. Windpower (USW)	9A-E
26. Vestas North American, Ltd. P.O. Box 276 Tehachapi, CA 93561 Phone: (805) 822-6839	Denmark	Vestas	11A, 30A-B, 39A, 44A, 46B-K
27. Vanquard "No Longer Active"	U.S.	Vanquard	26A
28. Villas Styria Grossfolz 1-A 8790 Eisenerz, Austria Phone: 03 848-2811	Austria	Floda	22A

MANUFACTURER/DISTRIBUTOR	COUNTRY OF ORIGIN	TURBINE BRAND NAME(S)	PROJECT(S) WHERE TURBINE IS USED
29. Wecs-Tec "No Longer Active"	U.S.	Wecs-Tec	49A
30. Wincon Energy Systems 1660 Hotel Circle Suite 400 San Diego, CA 92108 Phone: (619) 297-8066	U.S.	Wincon	27A
31. Wind Energy Group, Ltd. 345 Ruislip Rd. Southall, Middlesex, UB1 2QX ENGLAND	England	Wind Energy Group (WEG)	9C
32. Windmatic 17900 Sky Park Circle Suite 106 Irvine, CA 92714	U.S.	Windmatic	3A, 41A, 46B,F
33. Wind Power Systems 9279 Cabot Drive San Diego, CA 92126 Phone: (619) 578-0241 "No Longer Active"	U.S.	Storm Master	34A, 44A, 46A,G
34. Windtech Inc. P.O. Box 837 Glastonbury, CT 06033 Phone: (203) 659-3786	U.S.	Windtech	31A ,

APPENDIX C

REGULATIONS
CALIFORNIA ADMINISTRATIVE CODE
TITLE 20, CHAPTER 2, SUBCHAPTER 3, ARTICLE 4

WIND PROJECT PERFORMANCE REPORTING SYSTEM

Adopted
November 28, 1984

1381 Title and Purpose

The purpose of this article is to specify performance reporting requirements for operators of specified wind energy projects and for entities which purchase electricity from the projects and to identify requirements for the Commission to publish the information.

Authority cited: Sections 25213 and 25218 (e), Public Resources Code Reference: Sections 25216.5 (d), 25601 (c), and 25605, Public Resources Code.

1382 Definitions

For the purposes of this article, the following definitions shall apply unless the Commission has clearly indicated otherwise in these regulations:

- (a) "Contingency Costs": the costs which may be paid by investors after the initial investment, but which are not paid out of project revenues. Contingency costs may include such costs as turbine repairs or annual insurance fees paid during the reporting year.
- (b) "Cumulative Number of Turbines Installed": the cumulative total number of turbines of a given model installed by the end of the reporting period.
- (c) "Electricity Produced (kWh)": the total kilowatt hours actually produced by all of the turbines of a particular turbine model contained within the wind project where the electricity is delivered to a wind power purchaser for sale during the reporting period.
- (d) "Name of Wind Project": the name used for the project in any prospectus, offering memorandum, or sales literature.
- (e) "Number of Turbines Installed During Reporting Period": the number of additional turbines installed during the calendar quarter of the reporting period.
- (f) "Project Cost": the total cost of the turbines installed during the reporting period. Project cost includes all debt and equity investment in the project (including nonrecourse notes) and should be comparable to the project cost shown in the offering memorandum, prospectus or sales literature published by the developer.
- (g) "Projected Annual Production Per Turbine (kWh)": the annual average kWh production, by model, predicted by the developer in its prospectus, offering memorandum, or sales literature. This figure may be revised annually prior to the

first reporting quarter of each year and shall be based upon average site specific wind distributions and the wind turbine power curves.

- (h) "Projected Quarterly Production Per Turbines (kWh)": the quarterly breakdown of the Projected Annual Production Per Turbine.
- (i) "Rotor (M²)": The rotor swept area in square meters for each turbine model.
- (j) "Size (kW)": the turbine manufacturer's published kW rating at a specific miles per hour (mph) with wind speed shown in parentheses.
- (k) "Turbine Model": the common or manufacturer's name for the turbine if that is a commonly used term for the model of a specific rotor (M²) and size (kW).
- (l) "Wind Power Purchaser": any electricity utility or other entity which purchases electricity from a wind project, as defined in this section.
- (m) "Wind Project": one or more wind turbine generators installed in California with a combined rated capacity of 100 kW

or more, the electricity from which is sold to another party.

- (n) "Wind Project Operator": any developer or operator who directly receives payments for electricity from the wind power purchaser.

Authority cited: Sections 25213 and 25218 (e), Public Resources Code Reference: Sections 25216.5 (d), 25601 (c), and 25605, Public Resources Code.

1383 Reporting Period

For the purpose of this article, and unless otherwise indicated, the reporting period shall be each calendar quarter, beginning with the first quarter following the effective date of this article. Quarterly reports filed pursuant to this article shall be submitted not later than the forty-fifth day following the close of each reporting period. Reports shall be deemed submitted as of the date of postmark, provided that the report is properly and legibly completed.

Authority cited: Sections 25213 and 25218 (e), Public Resources Code Reference: Sections 25216.5 (d), 25601 (c), and 25605, Public Resources Code.

1384 Requirements to File

The information required by this article shall be submitted to the Commission by wind project operators and wind power purchasers. Reports shall be made on forms prescribed by order of the Commission and according to instructions accompanying the forms. A copy of the wind project prospectus, offering memorandum, and other sales literature shall accompany the initial report. All reports must be verified by a responsible official of the firm filing the report. Requests for confidentiality may be filed pursuant to 20 Cal. Admin. Code section 2501 et. seq.

Authority cited: Sections 25213 and 25218 (e), Public Resources Code Reference: Sections 25216.5 (d), 25601 (c), and 25605, Public Resources Code.

1385 Information Requirements: Wind Project Operators

Each operator firm submitting information pursuant to the provisions of the article shall include the following:

- (1) Name of wind project
- (2) Name and address of operator
- (3) Name and phone number of contact person at operator's firm

- (4) Operator's name as shown on power purchase contract (if different than 2 above)
- (5) Name of wind power purchaser
- (6) Purchase contract number
- (7) Resource area and county
- (8) Dates of reporting period
- (9) Turbine model
- (10) Cumulative number of turbines installed
- (11) Number of turbines installed during reporting period
- (12) Rotor (M^2)
- (13) Size (kW) at stated wind speed
- (14) Project cost
- (15) Additional project contingency costs for which investors may be responsible
- (16) Projected quarterly production per turbine (kWh)
- (17) Projected annual production per turbine (kWh)
- (18) Electricity produced (kWh)
- (19) Turbine manufacturer's name and address
- (20) Operator comments, if any

Authority cited: Sections 25213 and 25218 (e), Public Resources Code Reference: Sections 25216.5 (d), 25601 (c), and 25605, Public Resources Code.

1386 Information Requirement: Wind Power Purchase

Each wind power purchaser submitting information pursuant to the provisions of this article shall include the following:

- (1) Name of purchaser's firm
- (2) Name and phone number of contact person at purchaser's firm
- (3) Date of report
- (4) Name of wind project operator
- (5) Number of contract with wind project operator
- (6) kWh's produced during reporting period
- (7) Dates of reporting period
- (8) The maximum MW's which the operator can deliver to the purchaser as specified in the power sales agreement
- (9) Purchaser comments, if any

Authority cited: Sections 25213 and 25218 (e), Public Resources Code Reference: Sections 25216.5 (d), 25601 (c), and 25605, Public Resources Code.

1387 Publication of Data

The Commission staff shall compile and distribute, on a quarterly basis, the information reported by wind project operators and purchasers. Cost data will be published by the Commission in an aggregated form to the extent

necessary to assure confidentiality. The final publication of each year shall combine the performance data for that year. The publication shall designate the name of any wind project operator from whom performance data is not received.

Authority cited: Sections 25213 and 25218 (e), Public Resources Code Reference: Sections 25216.5 (d), 25601 (c), and 25605, Public Resources Code.

1388 Failure to Provide Information

The Commission may, after notifying any person of the failure to provide information pursuant to this article, take such action to secure the information as is authorized by any provision of law, including, but not limited to, Public Resources Code section 25900.

Authority cited: Sections 25213 and 25218 (e), Public Resources Code Reference: Sections 25216.5 (d), 25601 (c), and 25605 (e), and 25900, Public Resources Code.

1389 Exemptions

Operators of wind projects of less than 100 kW rated capacity or operators who do not offer electricity for sale are exempt from this article.

Authority cited: Sections 25213 and 25218 (e), Public Resources Code Reference: Sections 25216.5 (d), 25601 (c), and 25605, Public Resources Code.